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The Canning Industry.

The canning industry of this country has grown during the past fifty years from nothing to its present important position. In every State there are now one or more well-equipped factories, and there is scarcely a product of land or sea which is not preserved in cans.

The economic value of this industry can hardly be overestimated. While railroads and refrigerator cars have served to handle foods in large quantities from the more remote points of production to the consumers, canning does even more, as it enables the products of the summer season to be kept for winter use and to be transported long distances without the expensive equipment necessary for refrigeration. Tomatoes canned in Georgia or salmon canned in Alaska may be eaten in Africa. Further than this, canning, which can be done for an exceedingly small cost by means of the improved machinery in use, places vegetables before the poorer people at a price which they can easily afford to pay, and in this serves to improve their diet. Again, the stimulation given to the growth of certain agricultural products is appreciable, and the encouragement to needful diversification of crops is gratifying. Especially is this so in the South, where new canneries are rapidly being established.

The equipment necessary for a cannery is neither complicated nor expensive, and the actual work of canning does not require any unusual degree of expert knowledge. Taking tomatoes as an instance, when they are brought into the establishment they are placed in a wire scalding basket and dipped for a few moments in the scalding kettle containing boiling water. After this they are taken to the peeling table, where the operatives strip the skin off and pile the tomatoes on a tray. This is taken to the packing table, and here they are placed in the cans and the cover laid on. The cans then go to the "capper," who solders the top on, leaving a small hole in it. Then they go into an iron basket and are lowered into an iron kettle. In this the contents of the can are heated and all air expelled. When this has been done they are removed and pass to the "tipper," who quickly seals the small opening with a drop of solder. From him they go into another iron basket and are lowered into a kettle, where they are "processed" or cooked for twenty-five minutes, and upon being removed from this are allowed to cool, labeled and packed in boxes for the market. With other vegetables or fruits the process is varied to suit the needs of the material being worked on, but with none of them is it more intricate or difficult.

So simple a process may be done with simple machinery, and consequently with a small investment of capital. Indeed, this is one of the attractive features of the canning business. A plant having a daily capacity of 2000 cans of three pounds each, or 2750 cans of two pounds each, requires one kettle for processing and exhausting, one scalding kettle, one fire-pot, a set of crane fixtures for handling the iron baskets, furnace doors, grate bars, soldering irons for capping, tipping or sealing, a scalding basket, process cage, thermometer and some small tools. Twenty-five hundred bricks would be needed to set the kettles

and construct a chimney, and a building twenty by thirty feet would accommodate all. This equipment, apart from bricks or building, can be secured for \$100.

The following list shows the machinery necessary for larger-sized plants and its cost:

Canning machinery for 3000 cans, 3-pound, or 4000 cans, 2-pound:

One process kettle, one exhaust kettle, one scalding kettle, two fire-pots, one set furnace doors and grate bar, two capping machines, two capping coppers, two tipping coppers, two scalding baskets, two process cages, two exhaust cages, crane fixtures and necessary small tools. It would require 3000 brick to set the kettles and a building twenty by forty feet to accommodate the appliances. Cost \$150, not including bricks or building.

Canning machinery for 4000 cans, 3-pound, or 5000 cans, 2-pound:

One process kettle, one exhaust kettle, one scalding kettle, one cooling tub, two process cages, two exhaust cages, three scalding baskets, two fire-pots, crane fixtures, furnace doors, grate bars, capping and tipping appliances and necessary small tools. Requires 3500 bricks to set kettles and chimney, and a building twenty by fifty feet. Price \$200, not including bricks or building.

Canning machinery for 10,000 cans, 3-pound, or 13,000 cans, 2-pound:

One process kettle, one exhaust kettle, one scalding kettle, one cooling tub, four process cages, four exhaust cages, four scalding baskets, three fire-pots, crane fixtures, furnace doors, grate bars, capping and tipping appliances and all necessary small tools. Requires 4000 brick to set kettles and erect chimney, and a building thirty by sixty feet. Cost \$300, not including bricks or building.

This certainly does not represent a large outlay of capital in the plant, and all else that must be provided for is that necessary to pay for material and labor. This latter item depends, of course, upon the size of the establishment. The larger the plant the smaller will be the relative proportion of the cost of some classes of labor. As a rule, however, in such plants as have been described, one man at \$1.50 to \$2.00 per day can do the processing; one fireman at \$1.00 can attend to the furnace and some small matters. For capping and tipping together the average price is fifteen cents per 100 cans. For peeling three cents per 100 quart bucket, about thirty cents per 100 cans, is paid. For labeling cans twenty-five cents per hundred is paid, and for packing the general price is \$1.00 per day, 1000 cans being regarded as an average day's work. Thus, in a plant packing 4000 cans of two pounds each per day, the average labor cost will be about \$25.00 per day, or a little over six cents per can. Besides this the raw material, cans and small supplies must be secured.

About a fair crop of tomatoes would be from 300 to 400 bushels per acre, and in some cases 600 bushels have been secured. As one bushel will fill from sixteen to twenty cans of three pounds each, it would take 200 acres to supply the needs of a 4000-can factory, or allowing twenty days operating on tomatoes alone the product of 4000 acres would be consumed. But besides tomatoes there is corn, okra, beans, peas

and many other farm products to work up. In the fruit season there will be peaches, pears, plums and berries.

During 1892 there were packed in the United States 3,223,165 cases of tomatoes, against 3,322,365 in 1891. Of this the South packed 1,055,498 cases in 1892, against 885,110 cases in 1891. The corn pack of the country for the same period, 1892, was 3,417,190, against 2,837,153 cases in 1891. Of this the South packed a little over 500,000 cases.

This industry offers a wide field for the South. The export trade of this country in canned goods has never been pushed as it should have, and while it has grown during the last few years, it is not nearly so great as it might be made by due enterprise. With the announcement of direct trade between Southern and foreign ports this industry should receive a large share of attention. No section of the country is better adapted for growing the vegetables and fruits needed for canning than the Southern States, and the rapid growth of canneries there during the past six months attests to the success of their operation.

Georgia in Brief.

C. J. Haden, of Atlanta, Ga., whose interesting letters from abroad last summer will be remembered by our readers, has written to the *London Times* some comments upon English ignorance of the South, and has taken the occasion to put into a few words a resumé of Georgia's advantages and resources. His letter follows:

"It was a matter of great surprise to me to find that the State of Georgia was so little known in English commercial circles. During my visit to England four years ago, and also while there again during the past summer, I had the pleasure of meeting a number of manufacturers of cotton fabrics as well as timber merchants. With only a few rare exceptions I found the people who spun our cotton and sold our timber knew amazingly little of our resources. Georgia was a pioneer in the pitch pine export traffic. Throughout the United States long-leaf yellow pine (known in England as pitch pine) is commonly called Georgia pine for the sake of brevity. While other States produce the same species in considerable abundance, yet, all things else being equal, the saw-mill operators prefer to operate in Georgia—first, because Georgia has the advantage of an Atlantic coast front, and, second, the soil upon which the timber grows is more valuable after the trees are cut away.

"The soil of south central Georgia is decidedly fertile. After the trees have been cut away the land is easily made ready for the plow. There is very little undergrowth. The land is generally undulating, resembling very much in topography the prairies of the West. In the matter of hills and valleys it differs very little from that portion of England traversed by the London, Chatham & Dover Railway. The soil is light and loamy, with a small ingredient of sand. It produces syrup cane, cotton, oats, hay, Indian maize and both Irish and sweet potatoes. The peculiar excellence of these lands is their fruit-yielding power. Pears, peaches, figs, pomegranates and grapes are the fruits now

most generally grown. Such vegetables as watermelons, cantaloupes, peas, tomatoes and cabbages grow well, especially melons. In the production of melons it is perhaps the foremost section of the United States. Tobacco is now being grown in southern Georgia, and yields from 900 to 1200 pounds per acre.

"The section of the State specially referred to above lies between the 31st and 32d degrees of latitude and from 50 to 150 miles west of the Atlantic ocean. This strip stretches from the Florida line northward for about 150 miles.

"If Georgia had put forth the usual Yankee energy these lands would have been in the hands of capitalists or of foreign settlers long ago. But the people of Georgia, true to their English ancestral instincts, have remained conservative rather than boom their State. There are hundreds of thousands of acres of land in Georgia containing pine trees enough to average 6000 to 9000 superficial square feet of pitch pine timber per acre which can be bought for a guinea an acre, giving the purchaser a perfect title in fee-simple to the whole property, including the soil. The soil will produce 400 gallons of syrup, or two tons of hay, or 100 pounds of tobacco per acre with only fair cultivation. One would think that there was some hidden defect if such land should remain so low in price. The whole truth is that the English settlers who came here 150 years ago have simply been content to keep the country for themselves and their children, satisfied to wait for the slow natural increase of population rather than seek immigrants. The climate of this section is about the same as that of southern France. Its convenience to the ocean and the consequent saving of freight charges in the transportation of products necessarily make it more desirable than the far West, where the transportation to the sea costs more alone than the cultivation of the crops."

Virginia vs. Tennessee.

The State of Virginia and the State of Tennessee are parties to a suit of which the argument consumed practically all the time of the United States Supreme Court last week, Virginia seeking to secure a large strip of land now within the boundaries of Tennessee, but claimed by the Old Dominion to be a part of its territory. The tract in question is a wedge-shaped strip of land stretching across the northern border of Tennessee, adjoining Virginia on the south. It is 113 miles in length, two miles in width at its eastern and eight miles in width at its western extremity. The country is mostly sparsely settled, but it is in the line of the material development of southwestern Virginia and eastern Tennessee.

One of the towns in dispute is Bristol, Tenn., which has grown greatly in the last decade, and enjoys two municipal governments according to the present boundary line between Tennessee and Virginia, the main street separating the Tennessee section of the town from the Virginia section. If Virginia should win the suit the whole town would be a part of its territory.

Attorney-General Ayres is the principal representative of Virginia before the court, and associated with him are Attorney-General Scott and William F. Rhea. Attorney-General G. W. Pickler repre-

sented the State of Tennessee, with A. S. Collier, Abram L. Demoss and C. J. St. John as his associates.

The claim of Virginia to this territory is based on the allegation that the boundary she now contends for was recognized by the State of North Carolina within the true line of division between the two States, and that when North Carolina ceded what is now the State of Tennessee to the United States and Tennessee came into the Union the newly-admitted State claimed and secured more territory than belonged to it. Tennessee asserts that the line as now run is the true one.

Orlando Banks Consolidate.

The banks of Orlando, Fla., have had under consideration for some time past the consolidation of their interests, and last week the First National and Citizens' National Banks of that city completed the necessary arrangements for consolidation. Two of the leading monied institutions south of Jacksonville are now merged into one, which gives Orlando great character as a banking centre. The paid-up capital of the consolidated bank will be \$150,000, and, with less expense than was required to conduct the two institutions, the new organization will have every advantage for conducting business. It will be known as the First National Bank of Orlando, and the following is the roll of officers: President, Nat Poyntz; vice-president, W. L. Palmer; cashier, James L. Giles; assistant cashier, O. T. Poyntz. The directors are: Nat Poyntz, W. L. Palmer, J. B. Parramore, James L. Giles, J. H. Lee, W. A. White, J. N. Bradshaw, W. G. Peck and W. R. O'Neal. With the announcement of the above organization comes the news that a State bank will be organized in Orlando at once with a capital of \$50,000. The directory of the new bank will be composed of some of the wealthiest and best business men in Orange county.

A New Financial Institution in New Orleans.

A meeting was held in New Orleans on the 7th inst. at the rooms of the Clearing-House Association in regard to the organization of a new savings bank. The following bank presidents were in attendance: Mr. A. Baldwin, of the New Orleans National; Mr. Walmsley, of the Louisiana National; Mr. Henry Gardes, of the American National; Mr. O'Conner, of the State National; Mr. George W. Nott, of the Citizens' Bank; Mr. W. P. Nicholson, of the Bank of Commerce; Mr. L. C. Fallon, of the Mutual National; Mr. Carl Kohn, of the Union National; Mr. George P. Preston, of the Hibernian National; Mr. John W. Castles, of the Southern National, and Mr. J. C. Morris, of the Canal Bank. There were also representatives from the Sun and the Home Insurance Companies. Mr. Morris, of the Canal Bank, acted as chairman, and Mr. Henry Gardes, of the American National Bank, acted as secretary. The name of the new bank was adopted at this meeting, and it will be called the Provident Savings Bank & Safe Deposit Co., for which a suitable building will be provided. After some discussion in regard to the capital stock of the bank, the feeling seemed to be to place it at \$100,000. This matter, as well as others, was referred to a committee on organization, and at a subsequent meeting later in the day, when it was decided to increase the capital above the limit first decided upon so as to give a full opportunity for all the financial institutions and insurance companies to invest in the movement, the question of capital stock was decided, and \$200,000 was the figure, of which \$125,000 was subscribed within ten minutes after the declaration of the figure. A special committee was appointed to arrange the details of organization.

Meeting of the New Orleans Real Estate Association.

A meeting of the members of the New Orleans Real Estate Board was held in that city last week, President George G. Frederichs in the chair, with N. E. Bumbargden as treasurer, and C. R. Urquart, secretary. This organization was formed a few months ago, and the object of this meeting was mainly to adopt the constitution and by-laws, which were agreed to after considerable discussion. The objects of the board are to establish and maintain a central body of reference and union for its members; to acquire, preserve and disseminate valuable information pertaining to real estate in New Orleans and the State of Louisiana; to encourage, establish and maintain uniform business principles and usages in real estate transactions, and to lend aid and influence in the upbuilding of New Orleans. Provision is made for a board of directors and for a president, vice-president, secretary and treasurer. The regulation and scale of commissions and charges upon sales and the rules for the listing of property were also provided for after much discussion. After the appointment of a committee on printing the meeting adjourned.

Turpentine Men in Convention.

There was a large attendance at the Turpentine Association's convention, which held its sessions on the 9th inst. at Waycross, Ga. Reports from various associations showed that the cut did not exceed 50 per cent. within the association, and that the price-list as adopted is being strictly adhered to. The question of increased freight rates was discussed and the following resolutions adopted:

Whereas, It has come to our knowledge that an effort is being made by some of the leading railway systems of our State to obtain a higher freight rate, and that a decision will probably be arrived at within a few days—

Resolved, 1st. That the present condition of our industry will not admit of an increase in freight rates, the present rate on rosin being exorbitant as compared with other classes of similar value, and that on spirits is sufficiently high.

2d. That the chair appoint a committee of five, two factors and three producers, to appear before the railroad commission and submit argument in opposition to an increase of freight rates on naval stores.

E. P. Millar, John R. Young, W. C. Powell, A. G. Cassels and O. L. Bass were appointed delegates to call on the railroad commissioners at once and present this resolution and submit arguments. The *Operators' News* was adopted as the official organ of the association, and will be published weekly by A. G. Cassels at Mackintosh, Ga. The question of tanking spirits turpentine by the Savannah, Florida & Western Railway was discussed, and the following resolution, offered by A. Pridgen, was unanimously adopted:

Resolved, That this association heartily approves the movement in progress by the Savannah, Florida & Western Railroad for the erection of tanks in Savannah for the purpose of storing spirits turpentine, and believe the same will benefit the industry, and that the operators connected with the association will give all possible patronage to the same, and that a copy of this resolution be sent to the officers of the Plant system.

Sale of the Car Works at Anniston and Decatur, Ala.

The United States Rolling Stock Co.'s plants at Anniston and Decatur, Ala., were sold at receiver's sale on the 9th inst. and purchased by the United States Car Co. through Mr. George W. Ristine, its agent. The property was bid in at \$150,000, subject to a blanket mortgage of \$1,300,000, which covers, besides the two Alabama plants, one at Urbana, Ohio, and one at Hegewisch, Ill. The latter not having been disposed of yet, the proportion to be assumed by the Alabama plants cannot be assessed. The latter two plants employ nearly 2000 men, and Mr. Ristine expects

to have them in operation in about thirty days, as by that time the courts will have confirmed the sale. Negotiations for an order for 1500 cars for the Louisville & Nashville Railroad are now pending.

Proposed Consolidation of Knoxville Foundries.

A movement is on foot in Knoxville, Tenn., to consolidate the foundries in the city into one large concern, and manufacture gas and water pipe, iron columns and other heavy foundry work. As the city is an important distributing point for East Tennessee, such a company should be enabled to carry on an extensive business. The nearest point to the east at which similar work is done is Radford, Va., and on the west, Chattanooga, Tenn. The improvements to be made in the Knoxville water-works system will require between 4000 and 5000 tons of pipe, and to make this alone would furnish a good reason for carrying out the project. The several foundries now operating have been cutting prices until there is not much more than a living profit in the work, and the consolidation would change this and enable all to secure better results than now.

The Granite Mountain at Llano, Texas.

It is reported that the granite mountain in Burnet county, near Llano, Texas, was sold on the 4th instant to C. P. Huntington, of the Southern Pacific Railroad Co., for \$300,000 cash. This mountain is now furnishing the granite for the Galveston harbor jetty work, and from this quarry, we believe, at least from the same locality, was taken the granite used in the building of the magnificent capitol at Austin, which cost over \$3,000,000. The Llano people have had a great deal to say about their Bessemer ores, but comparatively little attention has been given to the granites and marbles of Llano, Burnet and Mason counties, which are found in inexhaustible quantity and of many varieties. One variety, known locally as "opal granite," is a dark mottled color, showing when polished on almost every spot of its surface as large as a ten-cent piece a beautiful opal. About twenty miles from Llano there is said to be one solid mass of granite covering 600 acres of ground, rising almost perpendicular on three sides to an elevation of 300 feet, the fourth sloping sufficient to make it possible to climb to the top. When on top of this great granite pile you find an unbroken surface of solid granite covering nearly 150 acres, and looking down over the three perpendicular sides you see the ground just 300 feet below you. It is said that there is only a small crack in this entire mass of granite.

A New Development Company at Llano, Texas.

The Bessemer-Llano Development Co. has been formally organized at San Antonio, Texas, and the following gentlemen chosen as the directors for the first year: A. C. Schryver, J. R. Fleming, Richard Wooley, L. S. Berg, A. W. Houston, C. W. Ogden and Frank Grice, of San Antonio, and F. J. Semple and W. A. H. Miller, of Llano. The company's capital stock is placed at \$3,000,000, of which \$25,000 is paid in. Mr. Schryver, in speaking of the new concern, is quoted as follows:

"The company owns about 9000 acres of land located around the town of Llano. This land was carefully selected for its mineral, iron, graphite and different kinds of granite. There is also one section of the land that is supposed to be rich in silver. Besides this the company owns a one-half interest in the Oliver iron-ore mine, which property is now opened up to a depth of 100 feet, and shows a vein over twenty feet wide of iron ore running over 65 per cent. in metallic iron. Three car-

loads of machinery, to be used in opening up and developing the mine, have now arrived at Llano. The railroad runs through several of the properties, and a switch is now being put into the Oliver mine, a distance of one and a-half miles from the main line. The ore is Bessemer."

Long Distance Electrical Transmission.

In a paper on "Long Distance Transmission of Power," read before the St. Louis National Electric Light Convention by Charles S. Bradly, the writer says:

"It now lies within our means to build an electric transmission of power plant from coal mine to city, which shall cost \$300,000, and will transmit 5000 horsepower; this plant will do the work of 30,000 men steadily day and night, year in and year out, and once placed will last a lifetime. The \$300,000 represents the work of the 30,000 men for about four days, or an outlay of about \$10.00 each; thus these men can build a plant in four days that will do more work during their whole lives than they can. Can anything appeal to the imagination of man with more force? The energy of 5000 horses transmitted noiselessly over a small wire; the coal from the mine placed by one act immediately beneath the boilers; the energy thence running to its destination without any labor from man; the air to supply combustion taken in the country, thus not robbing the human being gasping for breath in the city; the smoke and foul gases being thrown off where they will do no harm. Think of a city free from smoke, its cars, elevators, shops, run and lighted by electricity which shall be generated miles away. I have not said houses heated, but I hope that before 1900 we may say this also. The present obstacle to heating by electricity is the inefficiency of the steam engine. Many are looking for the direct conversion of the energy of coal into electricity. There is no doubt that it can be done, but I fear it will never be economical, for we must depend upon the combustion of the coal in the oxygen of the air.

"The most promising of all fields to increase the efficiency of the conversion of the energy in coal into electricity, I believe, lies in the gas engine, the atmospheric gas engine of Otto Langen having reached the high efficiency of 72 per cent. In this engine the piston is allowed to shoot up by the explosion and do its work in the descent. There seems to have been mechanical difficulties in the way of the success of this machine, but these can be overcome. Then, suppose we have an efficiency of 72 in an engine and 75 per cent. in transmission, we will have, all told, 54 per cent. of the energy of the coal delivered to point of consumption, which will make electrical heating not only possible but preferable to any or all other forms. Thus we may hope at no distant day to burn all coal necessary for the uses of a great city at the mine. Further, we may take from the coal, first, its chemicals, which have become so valuable in the arts; then use the balance as gas in our engines."

Voices from the South.

"I realize that no man in my line can afford to be without the MANUFACTURERS' RECORD. Enclosed please find check for one year's subscription.

"H. V. MAXWELL, M. E.,

"Knoxville, Tenn."

"Please send us one copy for 1893, weekly, commencing from February 1, 1893, of your MANUFACTURERS' RECORD. It is the only journal in which we find RELIABLE news pertaining to Southern building, and we take a great many.

"GOLUCKE & STEWART,

"Architects and Superintendents,
"Atlanta, Ga."

GENERAL NOTES.

Brief Mention of Various Matters of Current Interest.

At Mobile, Ala., on the 8th inst., a builders' exchange was organized. Forty persons, representing all the trades—master-builders, bricklayers, plasterers, plumbers, dealers in hardware and manufacturers—asssembled together, and after considerable discussion succeeded in perfecting the desired organization. The constitution and by-laws are to be presented at a meeting soon to be held. The following officers were elected to serve the ensuing year: C. C. Griffin, president; Daniel Harrison, vice-president; N. K. Ludlow, secretary, and N. Phelan, treasurer. The officers were made a committee on constitution and by-laws, which they will prepare and submit to the exchange for adoption or amendment. The committee are also charged with a selection of a suitable place for the exchange.

THE Thomasville Exchange & Banking Co., of Thomasville, Ga., is rapidly developing the suburban town of La Cubana City. The property comprises over 800 acres adjoining Thomasville, and the company is offering great advantages to manufacturing enterprises. The A. del Pino Co., manufacturer of cigars, etc., is to locate at once a factory in La Cubana City. Its building will be of brick, three stories high, 40x150 feet, and will employ 150 Cuban cigarmakers. Work has been begun on an electric street railroad to connect La Cubana City and the Savannah, Florida & Western depot. The officers of the Thomasville Exchange & Banking Co. are as follows: D. I. MacIntyre, president and general manager; T. C. Mitchell, vice-president, and D. I. MacIntyre, T. C. Mitchell, A. T. MacIntyre and W. H. Mitchell, directors. The company is a strong one personally and financially.

At the special term of the Jefferson county (Ala.) court the commissioners expected to receive bids from the Tennessee Coal, Iron & Railroad Co. and the Sloss Iron & Steel Co. for convicts to work in the coal mines during the coming year. Neither company, however, put in any bids, so the convicts will remain on the public roads, and possibly some may be sent back to the prisons.

THE recent combination of safe manufacturers has been incorporated under the name of the Diebold-Mosler-Damon Company. The new company comprises all the other manufacturers in the country except that of Herring-Hall-Marvin trust, which was organized last June. The capital stock of the new company is \$5,000,000, divided into 28,000 shares of preferred stock and 22,000 shares of common stock. Mr. Mosler, of the Mosler Safe & Lock Co., is president; W. Clark, of the Diebold Company, and Thomas Barnes, of the Barnes Company, are vice-presidents, and George L. Damon, of the Damon Safe and Iron Works, is treasurer.

THE extensive deposit of asphalt near St. Jo, in Montague county, Texas, is being operated by a local company having a capital stock of \$200,000. The product is being shipped all over the country, and has been pronounced equal to any in use. Its development promises to become a large industry, as it is the only mine now being worked in the Southwest.

A NEW banking institution has been organized at Chattanooga, Tenn. The corporate name of the organization is the Chattanooga Banking & Storage Co. The authorized capital of this concern is \$500,000, divided into 20,000 shares of \$25.00 each, payable \$1.00 monthly. It will furnish facilities for conducting a regular banking business in every detail, and will provide

warehouses for the storage of merchandise and other commodities as securities upon which to make cash loans. The officers of the company are W. E. Ashcraft, president; W. H. Hackney, vice-president, and John R. Wallace, cashier. These gentlemen, together with D. M. Agey and B. H. Moore, constitute the board of directors.

THE Ensley City Land Co. held a meeting in Ensley City, near Birmingham, Ala., on the 10th inst. and decided to call a meeting of all stockholders on April 11, the purpose being to reduce the capital stock from \$10,000,000 to \$500,000.

THE Elmore Iron Works, erected by E. L. Moore at Grand Rivers, Ky., has been moved to Birmingham, Ala., and is now located at Twenty-second and C avenue. The works are quite extensive, being designed for producing all material needed for construction, such as boiler machinery, standpipes, furnaces and similar work. The heavy iron rolls in use will bend a plate eight feet wide by three-quarters of an inch in thickness. This is the most complete plant in the State for such work, and is a most acceptable addition to Birmingham's industries.

A PLAN is being considered in Houston, Texas, of holding a cotton carnival during the coming fall. The idea is to organize an association with a capital stock of \$30,000 to take the matter in hand, using the large auditorium building, soon to be erected, for exhibits. Premiums will be offered for county displays, and, as it would continue for two weeks, low rates would be secured from the railroads.

ARRANGEMENTS are about completed in Memphis, Tenn., for the erection of a large auditorium having a seating capacity of 6000 people. The capital stock of the company organized to build it will be \$20,000, and work will be commenced as soon as \$15,000 has been subscribed.

GOVERNOR FISHBACK, of Arkansas, has appointed the following five directors for the management of the Arkansas display at the World's Fair, as provided for in the bill recently passed by the legislature: Prof. James Mitchell, Prof. W. S. Thomas, Hon. R. B. Weaver, Hon. Hal. Norwood and Edward Pasco.

WASHINGTON, LA., is being pushed to the front as a manufacturing centre of southwestern Louisiana. The town is located on the bayous Boeuf and Courtableau, with steamboat service to New Orleans and railroad facilities by the Southern Pacific route, and possesses, according to reliable information, great advantages for hardwood and furniture manufactures.

THE sales of loose leaf tobacco on the Danville (Va.) market for February amounted to 6,077,766 pounds, being the largest sales ever made in a single month. The sales for the first five months of the fiscal year were 16,200,000 pounds, an increase of 1,488,000 pounds over the same period last year.

THE \$100,000 grain elevator at Savannah, Ga., which has been idle for a number of years, is likely to be soon put in shape for handling grain. It is the property of the Central Railroad & Banking Co.

THE schooner Marion Hill loaded a cargo last week at Jacksonville, Fla., of 392 tons of kaolin in bulk consigned to Wilmington, Del., where it will be distributed to several pottery concerns in Delaware and New Jersey.

THE committee on resolutions appointed at the Cotton Growers' Convention in Memphis will meet in New Orleans on March 21. H. C. Newsom, commissioner of agriculture in Louisiana, has issued a call for a meeting of all planters and others

in Louisiana interested in cotton culture, and efforts are being made to induce Texas cotton commissioners to attend the meeting. It is desired that concerted action be taken in all States relative to reducing the cotton acreage.

THE tract of land known as Bolivar Point, containing 2978 acres of land on the peninsula opposite Galveston, Texas, was recently sold for \$600,000. The purchaser was John R. Lewis, who represents Kansas City and Minneapolis capitalists. It is understood that the new owners expect to build a town on the tract, and will become interested in the proposed railroad from Galveston to Beaumont.

KNOXVILLE, TENN., has adopted vitrified brick as the street-paving material for all future work. Contract specifications as passed by the city council are very strict and require the brick to stand certain tests, and, if followed closely, will ensure good work. The city has advertised for bids on work to be done shortly.

A COMPANY is being formed by farmers adjacent to the Cumberland river between Dover and Nashville, Tenn., to run a new packet line on the river. This, it is believed, would prove quite a stimulus to the agricultural growth of the section by giving cheaper freight rates on farm products.

A LOUISVILLE (Ky.) syndicate represented by T. J. Minary, Wm. Gaulbert, Wm. Jarvis and St. John Boyle has secured control of the People's Electric Railway Co. and the Springfield City Railway Co. at Springfield, Ill., operating twenty-four miles of electrical railroad. It is proposed to issue \$750,000 of first mortgage 5 per cent. bonds, and it is estimated that the annual gross earnings of the two roads will amount to about \$140,000.

THE Mann-Arrington gold mine in Nash county, N. C., has resumed operations. During the Centennial Exposition in 1876 ores from this mine took the second prize. A considerable amount of new machinery has been purchased. The operators expect to find high-grade ore near where work was stopped.

ON March 11th the State Cotton Acreage Convention met in Austin, Texas, and passed resolutions relative to reducing the cotton acreage. Delegates were appointed to attend the convention at New Orleans.

A MEETING was held on the 28th of February at the Mechanics, Dealers and Lumbermen's Exchange, in New Orleans, of the committee on exhibit to the World's Fair, at which there were present Colonel Wickliffe, the State commissioner, and the following gentlemen members of the Columbian exhibit committee: H. Buddig, G. Shote, V. Lamban, W. R. Roberts, A. W. Moffat, W. W. Carre, H. Welman and G. Casac. Committees were appointed to collect funds and see to the construction of the exhibit. This exhibit will be a pavilion, in which every word known in the State will be used in its construction. The whole work will be ready for shipment by the last of this month, and Colonel Wickliffe has notified the fair officials in Chicago to that effect.

RICE-GROWERS around Savannah, Ga., are, as a rule, holding the balance of their crop in hopes of a rise in prices. As a consequence the local market is more than usually dull. The crop in Louisiana, amounting probably to 7,500,000 bushels, of which 6,000,000 have been received, controls the market. The crop around Savannah will be much greater this year than last, the receipts to date being 540,131 bushels, against 408,678 for the same period in 1892. Reports from the planters indicate that there will be a somewhat increased acreage this season, though at present it

is difficult to estimate exactly what it will be. Planters estimate the yield at about forty bushels to the acre. The average annual yield is put by the dealers at 550,000 bushels, which would require about 13,750 to 14,000 acres, though it is estimated that the acreage will be somewhat greater than that this season.

"IN speaking of the towns which had survived the financial depression of the past two years the MANUFACTURERS' RECORD might well have included Front Royal. Here our old and new factories are running; water works, electric lights and other improvements have been completed, and it seems to us that we are by no means laggards in the race of development."—Front Royal (Va.) *Gazette*. [There was no intention of ignoring Front Royal. The editorial only mentioned a few places where a revival from previous dullness had commenced, whereas Front Royal, like dozens of other places in the South, has gone right along steadily building up during the time of general inactivity, and hence did not need to be mentioned in the list of reviving towns.]

A SAMPLE of very fine red ochre was shown in Gainesville, Fla., last week. It came from the Gulf Hammock, and it is said that an inexhaustible supply is to be found on the land from which this sample was procured.

THE Rome Street Railway Co., at Rome, Ga., has completed the work of equipping its lines with electricity and will start operating April 1st. It possesses a model power station.

MR. PETTIS, formerly superintendent of the Basic City (Va.) Car Works, has leased them from the company, and is now making preparations to start and operate them. A number of men are engaged in placing the works in order, and stock is being received.

THE Chatfield Irrigation Co., of Brownsville, Texas, has been chartered with a capital stock of \$100,000. It is the purpose of this company to construct, maintain and operate a general system of irrigation applicable to canals, ditches and reservoirs in Cameron, Hidalgo and Starr counties, Texas, for the supplying of water for irrigating and other purposes for profit. The directors of the company are W. H. Chatfield, of St. Augustine, Fla.; Thomas Carson, F. M. Field, Frank Robb, F. San Roman, E. H. Goodrich, Celestine Jagon, E. S. Forto, A. P. Barreda, Christian Aess, G. M. Raphael, W. N. P. Dougherty and J. R. Monroe, of Brownsville, Texas. The officers are: W. H. Chatfield, president; Thomas Carson, first vice-president; W. P. Dougherty, second vice-president; J. B. Monroe, third vice-president; William Kelly, of Brownsville, secretary, and E. H. Goodrich, treasurer.

THE extensive tinware factory of Matthai-Ingram Manufacturing Co., located at the corner of Marshall avenue and Wells street, Baltimore, was damaged by fire to the extent of over \$90,000 early on Tuesday morning. The flames were discovered in the southeastern annex to the main building, a brick structure sixty by one hundred feet and three stories high, and through the efforts of the city firemen and employees of the Baltimore & Ohio Railroad the destruction was confined to the annex of the main structure. The first floor of the burned building contained about 200 tons of tinware which was badly damaged. The second floor was used as a finishing department, and the third as a stock-room. The fire will throw about 700 persons out of employment for a short period, as the burned building will be rebuilt at once. The insurance of Matthai, Ingram & Co. was placed through the agency of Edward G. Parker, and amounts to \$29,000 on the building and \$214,000 on the contents.

PHOSPHATES.

Fertilizers in Antigua.

[A report to the Department of State by Vice-Consul Galbraith.]

Prior to the year 1884 the use of patent manures for the growth of the sugar-cane was not looked upon with favor by the general body of planters here, the general belief being that patent manures exhausted the soil and the sugar made therefrom was inferior to that made from canes grown on lands manured by farm-yard manure. There are no data to guide us in comparing the quality or quantity per acre then with the results now obtained by those planters who largely employ fertilizers on their plantations, but one thing is certain, that the crisis in this industry in 1884 clearly demonstrated that if the sugar industry was to be continued here better cultivation and a generous application of fertilizers to the soil were essential. This is now becoming a standard practice with our leading planters, and, as a consequence, the importation of fertilizers is on the increase.

There are no figures showing the imports previous to 1889. In the following table I give the figures for the years 1889 to 1891 and the countries from whence imported:

From.	1889.	1890.	1891.
United Kingdom.....	\$74,034	\$79,115	\$54,447
United States.....	2,950	1,120	
Barbados.....	8,931	7,949	2,650
West Indies.....	2,679	4,630	3,660
British North America.....	40	5,025	
Antigua.....	26,545	27,590	
St. Christopher.....	45,590	29,950	
Dominica.....		7,399	
Montserrat.....	575	1,495	

The fertilizers chiefly imported are sulphate of ammonia, potash, superphosphates, basic slag, nitrate of soda and mixed fertilizers.

Sulphate of ammonia heads the list. It is chiefly imported from Scotland, where it costs from \$50.00 to \$60.00 per ton of 2240 pounds. It is sold here at from \$75.00 to \$80.00, and is guaranteed 24½ per cent. It is applied in the autumn at the rate of from two to three hundredweights per acre.

Potash is imported now more largely than in former years, and the indications are that the imports of this fertilizer will go on increasing for some time to come. What little has hitherto been imported comes chiefly from Barbados, where it costs \$68.00 per ton. This fertilizer, along with superphosphates or basic slag, is applied in the spring in the following manner: To every ton of potash apply of either superphosphates or basic slag five tons, and mix an equal quantity of ashes, then apply to the soil at the rate of three hundredweights per acre. This has been found to give good results.

Superphosphates are imported from Barbados, but I expect that the trade in this fertilizer will go to our manufacturers in Savannah. The crude material is there, and I see no reason why the manufactured article can come from anywhere else.

For the past year the feeling among planters has been in the direction of basic slag, or, as it is known in the States, odorless phosphates. What has been already imported has given general satisfaction, and I anticipate that during the coming season it will be imported in large quantities. It comes from England, is guaranteed to contain from 16 to 18 per cent. of phosphoric acid, and can be bought in London at \$10.80 per ton of 2240 pounds. This, like the foregoing fertilizer, is applied in the spring at the rate of from two to five hundredweights per acre.

Nitrate of soda was one of the fertilizers chiefly imported here, but of late years the quantity imported has been very small, sulphate of ammonia having replaced it. The price here is from \$50.00 to \$60.00 per ton.

O mixed manures, a special sugar-cane manure has been the favorite. It gave

general satisfaction, and the results from it were, on the whole, good. It was sold at \$60.00 per ton, and was guaranteed to contain 9 per cent. of ammonia (non-volatile), 20 per cent. of soluble phosphates, 3 to 4 per cent. of insoluble phosphates, 4 per cent. of potash and 7.4 per cent. of sulphate of potash. There were a great many brands of mixed manures imported, and, I believe, will again be imported the coming year, but the tendency among planters is to get pure fertilizers and mix on the plantations. The general belief among planters is that it will not pay to import mixed fertilizers. Basic slag, superphosphates, potash and sulphate of ammonia are the fertilizers of the future for this island; and, as regards the first two, they are sure to come from the United States. The freight from Europe is, as a rule, nearly double that from the United States.

Lately there have been several inquiries from manufacturers of fertilizers in the Southern States about the trade here, and one large manufacturing company sent its representative here. This indicates that, if the trade is worth having, efforts will be made by our manufacturers to get it.

Manures are on the free list. The only tax on them is the trade tax of twelve cents per bag. Superphosphates and basic slag are imported in bags, sulphate of ammonia and nitrate of soda in puncheons.

For the guidance of manufacturers I append a few analyses of the soil of this island:

To the southwest the formation is volcanic; northeast the general characteristic is limestone formation. In the volcanic section the soil is clayey and heavy. In the limestone section the soil is light and very rich and productive.

The following analysis is of a soil on a sugar plantation southeast of the town, the figures representing the plant food in soils three inches deep per acre: Lime 6783 pounds, magnesia 980 pounds, potash twenty-seven pounds, oxide of iron none, phosphoric acid eighteen pounds, sulphuric acid none, silica 1014 pounds, nitrogen 1687 pounds.

The next analysis is of a soil taken from a plantation at the base of the volcanic hills in the southwestern portion of the island and is as follows: Lime 4885 pounds, magnesia 747 pounds, potash eighteen pounds, oxide of iron thirty-five pounds, phosphoric acid thirteen pounds, sulphuric acid none, silica 5837 pounds, nitrogen none.

In the northeast of the island the soils are on the whole light, and in wet years are very productive. In this section some of the finest and most productive plantations are located.

The third analysis was as follows: Lime 400,000 pounds, magnesia none, potash 267 pounds, oxide of iron 3500 pounds, phosphoric acid eighty-seven pounds, sulphuric acid none, silica none, nitrogen none.

The following is the analysis of the soil on a plantation more to the north of the foregoing in the same district: Lime 280,000 pounds, magnesia none, potash 167 pounds, oxide of iron six pounds, phosphoric acid 217 pounds, sulphuric acid none, silica 1242 pounds, nitrogen none.

I may remark that the principal proprietors of sugar plantations on this island are resident here, and of those proprietors who are not resident their attorneys have the power to buy where the price suits them. If our manufacturers wish to cater to the trade of this island they must push their goods by sending representatives or consigning small quantities to some of our leading merchants. If once the market is secured it will be an easy matter to hold it. As I have already remarked, freights are in their favor. The accommodation given by European firms can, I am sure, be also given by our manufacturers. I am told three months is the usual time, but manu-

facturers can make their own terms. This being done, I anticipate that a large portion of the trade in fertilizers will go to the United States in coming years.

In the Anthony Region.

[From our own Correspondent.]

ANTHONY, FLA., March 13.

Nearly all the phosphate that has been shipped from the Anthony region during the last three months has been from the mines of the French and Stranathan Companies. Until quite recently these companies shipped from ten to twelve earloads a day. The other Anthony companies are storing their rock until there is greater activity in the phosphate market.

An obstacle to easy mining in the Anthony region is the limestone rock which is uncovered in removing the phosphate. This rock presents a very irregular surface, often occurring in high projections, from among which the phosphate is not easily removed. The Stranathan Company has adopted an economical method of disposing of this limestone in converting it into lime, and has made "lime-burning" a branch of its business. It has been found that this limestone makes as good lime as any found in Florida.

The French Company will soon increase the capacity of its plant by adding to it another set of log-washers. It has recently built several additional cottages to accommodate laborers recently added to its mining force.

An objection to screen-washers is their tendency to form clay-balls when phosphate embedded in a clayey matrix is passed through them. Boys are usually employed to throw out these balls. Recently, however, the Jeffrey Company has devised a machine for removing them called the "clay-ball extractor." It consists essentially of a revolving screen with steel brushes within it revolving in a direction opposite to that of the screen. The phosphate in passing through the screen is scoured and the clay-balls broken and screened out. The Central Florida Company has recently added one of these machines to its plant and it works well.

The Deacon Company is preparing a ground phosphate of high grade that is strongly recommended as a cotton fertilizer, and it expects to get large orders for it from the cotton States. It has recently had its Griffin grinder put in good condition, and is prepared to fill all orders for its ground phosphates.

The South Florida Railroad Co. has completed the grading and tie-laying of about seventeen miles of its road from High Springs to Dunnellon—about half this distance at each end of the line—and will begin laying the track very soon.

The Southern Fertilizer Co., of Orlando, Fla., which is engaged in the manufacture of fertilizers and deals in fertilizing materials, although only recently having gone into business, is building up a fine trade in the Orlando region. The plant is a good one. It uses high-grade material for its mixtures, and is making an honest effort to put upon the market a reliable fertilizer.

Phosphate Activity in Polk County.

BARTOW, FLA., March 11.

Among the many thriving and industrial centres of Florida Bartow furnishes a forcible example of enterprise and rapid development. Indeed, throughout the county of Polk the general features of trade are at present very encouraging. Among the business men of this city there is at present a decided spirit of push and energy in building and the addition of electric lights, water works and other enterprises which contribute to the upbuilding of a city. A new railroad depot is under consideration, and before another season a hotel of large proportions will be built to accommodate the increasing passenger travel.

It is, however, to the mining of phosphate and its successful operations which will contribute to the development of the whole county, and from present appearances this industry is being worked for all it is worth. Col. R. K. Foote, who has done so much to develop the phosphate industry, is at present engaged in projecting new enterprises connected with phosphate, and, it is said, some big deals are in progress which will be given to the public very soon. The mining pumps for the Foote Commercial Phosphate Co. have arrived, and will be hauled to the plant in a few days. Contractor Mayfield has commenced raising the buildings, and expects to have all under roof by April 1st, with the machinery on the ground by the 20th of current month. Dr. Ellsworth Hewitt and Mr. Simonds, of New York, the two capitalists that have leased the valuable phosphate property on Bowlegs creek, near Fort Meade, are getting affairs in good shape, and expect to have their gigantic plant in operation by April 1st.

Throughout Polk county there is considerable activity among the various mining companies, and large sums are being expended for betterments to phosphate plants. The majority of those engaged in mining phosphate are devising the best methods of laying down the product at the point of shipment at the lowest possible figure, and in order to do this the most improved machinery is being brought into action. Of the companies now improving their plants we may mention the Virginia-Florida Phosphate Co. This company is engaged in mining high-grade pebble phosphate showing analysis of 67 to 70 per cent., and as they have discovered that they cannot use hand labor to advantage in mining pebble, they are now introducing steam. They have had all their machinery overhauled and repaired, and with the new improvements they intend to introduce they can work and dry ready for shipment fifty tons per day of ten hours. This company has a storage capacity of 1000 tons, and they use a rotary iron dryer, with the usual conveyors and elevators intervening between the washer and dry-bin. They have a complete system of storage lakes which furnishes more than an ample supply of water for all purposes.

South Carolina Phosphates at the World's Fair.

There was a large meeting in Charleston, S. C., on the 10th inst. of phosphate and fertilizer companies in the rooms of the Chamber of Commerce to consider the advisability of making an exhibit of South Carolina phosphate at the World's Fair in Chicago. The following representative companies were present: The Charleston Mining & Manufacturing Co., Coosaw Company, Winsboro Granite Co., Bolton Mining Co., Imperial Company, and Ashley, Royal, Edisto, Eureka and Stono Companies, besides a number of gentlemen interested in phosphates and fertilizers. Mr. T. R. McGahan was called to the chair and Mr. J. A. Blake acted as secretary. The purpose of the meeting was explained by Mr. John B. Adger, Jr., who stated that it was a movement to secure a proper exhibition of the phosphate and fertilizer interests of the State at the World's Fair. A plan was laid before the meeting by Mr. James E. Murdoch which had been formulated by Commissioner Roche in conjunction with others of the city. An option has been secured upon space in the fair buildings of ten by twenty feet in size, which would be large enough for the urgent necessities of the exhibit. Subscriptions to a fund were called for, and every company present, as well as individuals, responded liberally, and the requisite amount virtually guaranteed. The chair appointed Messrs. Blake, Adger and McIver a committee to secure subscriptions from companies not represented at the meeting.

Commissioner Roche will be given the proper authority to secure the requisite space, and Governor Tillman has signified his intention of turning over the cases, fossils and exhibits which were used some years ago at New Orleans.

Phosphates for Chicago.

As Florida has already arranged to make a great display of her phosphate industries at the World's Fair, the rock dealers of Charleston, S. C., have inaugurated a movement looking toward giving the phosphate product of the State mines a suitable representation at Chicago. This movement will be participated in by all parties interested in the work of mining, as well as other industrial exchanges, and a strong effort will be made to give a creditable exhibit. A meeting of those interested in this undertaking will shortly be held for the purpose of taking decided action and formulating the specified plans of operation.

Phosphate Markets.

OFFICE MANUFACTURERS' RECORD,
BALTIMORE, March 16.

In the local phosphate market the tone is very quiet, with transactions in rock of very limited volume. Manufacturers are not buying, except for immediate wants, and under the present conditions of the phosphate market will not purchase for future delivery to any great extent. Advances from Europe continue in about the same tone, with present surroundings showing nothing to encourage higher prices for phosphates. The only arrival during the week was the schooner May Williams, from Charleston, S. C., with 850 tons of phosphate rock. Phosphate freights are dull, with very little business reported. We hear of one charter of the schooner Annie T. Ebner to load at Dale's Creek, S. C., for Baltimore on private terms. In the list of values there is no material change, and prices are steady. Ashley river rock is quoted \$4.75 and Charleston at \$5.00, and for future delivery \$3.50 to \$3.75 for 50 to 55 per cent. product. Florida river pebble 60 per cent. product \$3.75 to \$4.00 f. o. b., and land pebble 67 to 70 per cent. product \$4.75 to \$5.00 f. o. b. Florida hard rock 75 to 80 per cent. product is quoted \$7.50 f. o. b. Fernandina.

FERTILIZER INGREDIENTS.

There is no change in the general market, and business is restricted on account of the scarcity of nearly every ingredient entering into the manufacture of fertilizers. There is a good demand for all the offerings, which are light, especially of blood and tankage, the former being quoted \$3.05 to \$3.15 delivered, while the latter is very firm and scarce. Stocks in manufacturers' hands are sufficient for present requirements, and there is no disposition to purchase under present conditions. The quotations are as follows: Blood, 3.05 to 3.15 per unit f. o. b. Chicago; tankage, 7 per cent. of ammonia and 20 per cent. bone, \$32.00 to \$33.00 Baltimore; brimstone, best unmixed seconds and thirds, \$18.50 to \$20.00; nitrate of soda, 2½ cents per pound for spot and 2.20 to arrive; ground bone, \$28.50 to \$31.00 per ton of 2000 pounds; dissolved South Carolina phosphate rock, \$11.50 to \$12.50 per ton in bags for car lots; dried fish in job lots, \$30.00 to \$32.00; ground, \$36.00 to \$36.50; wet and acidulated, \$18.50 to \$20.00; dissolved bone black and dissolved bone ash, 18 per cent., \$20.00 to \$22.00; kainit, \$11.50 to \$12.00 per ton of 2000 pounds in bags; muriate of potash, \$1.85 per 100 pounds for spot goods of 80 per cent.

CHARLESTON, S. C., March 13.

A fairly steady and quiet market has ruled during the past week, and in all phosphate matters transactions are moderate. The general tone of the market remains unchanged, and operators are looking for a

more active season later on. Manufacturers here are buying freely, and there has been several shipments to Northern ports during the week. The schooner Kate V. Aitkin cleared for Philadelphia with 550 tons of phosphate rock, and the schooner B. F. Lee with 650 tons for Baltimore. Phosphate freight rates remain unchanged, and there is no scarcity of vessels. In the list of prices there is no change, and values remain steady under the current demand. Crude rock is quoted \$3.75 to \$4.00 f. o. b., hot-air-dried \$4.75 to \$5.00 f. o. b. and ground rock \$7.50 f. o. b. in bags. The comparative exports of crude phosphate rock and ground from the port of Charleston from September 1, 1892, to March 10, 1893, and for the same time in 1891, are as follows:

Destination.	1892-93.		1891-92.	
	Crude.	Ground.	Crude.	Ground.
Baltimore.....	20,455	.....	29,001	.....
Philadelphia....	10,156	.....	10,256	.....
Boston.....	.....	.....	.....	.....
Elizabethport....	.....	.....	.....	.....
Wilmington, Del..	2,078	.....	600	747
Barren Is., N. Y..	.....	.....	1,673	.....
New York.....	5,457	1,641	5,658	1,613
Mantua creek....	1,319	.....	2,057	.....
Weymouth.....	7,770	.....	11,020	.....
Richmond.....	4,449	.....	3,851	.....
Seaford, Del....	600	.....	600	.....
Newton ck., N. C.	1,078	.....	1,078	.....
Welsh Point.....	665	.....	450	.....
Orient, L. I.....	.....	.....	1,890	.....
Other ports....	2,790	.....	2,490	300
Total exports...	56,817	1,641	70,624	2,660
By railroads....	.....	.....	35,600	1,613
Foreign ports...	175	.....	442	.....
Grand totals...	56,992	1,641	106,666	4,273

FERTILIZER INGREDIENTS.

The general tone of the market continues very firm for all ingredients, and the offerings in some cases light. There is a scarcity of blood and tankage, and values rule higher. Manufacturers are purchasing freely, and the market is active, in sympathy with the demand for manufactured goods. Kanit is quoted at \$12.50; brimstone, to arrive, \$24.00 per ton for best unmixed seconds; nitrate of soda \$2.50 (direct) per 100 pounds. Ammoniated fertilizers, 2 per cent., are steady at \$18.50 to \$19.00, and 2½ per cent., \$19.50 to \$20.00.

Phosphate and Fertilizer Notes.

THE steamship Cufic, from Norfolk, which arrived at Liverpool, reports having passed on February 24 the schooner Benjamin Courtney, from Port Tampa February 1 with cargo of phosphate for Weymouth, Mass. The schooner had apparently been abandoned.

THE French Phosphate Co. will soon increase the capacity of its plant by adding another set of washers. The company is providing additional cottages for laborers which have recently been added to their mining force.

THE steamship Crown of England is receiving 180 carloads of phosphate at Port Tampa, Fla., from the Netherland mines for Liverpool.

EVANS & HUBBARD are forwarding a cargo of phosphate from their Dunnellon mines to be shipped via Fernandina.

THE Dunnellon Phosphate Co. lately received a new Corliss engine for their large washer. They have also had built a light draft stern-wheel steamer built by the Merrill-Stevens Co. at Jacksonville, Fla., and sent via the East & West Coast to the mouth of the Withlacoochee river and up to Dunnellon. It is to be used for towing barges laden with phosphate from the dredgers to the washers.

THE Stonewall Phosphate Co.'s mines near Le Roy, Fla., are at present actively engaged in mining phosphate, and the output during the present season will be large. The company's plant is well equipped with all the modern appliances for mining.

THE special deputy collector of the Key West district of Florida reports the ship-

ments of phosphate for the month of February as follows: Steamship Schiahalion on the 1st for St. Nazaire, France, with 1750 tons; bark Hinda on the 9th for Falmouth, England, with 700 tons, and the steamship Harvester on the 13th for Helsingburg, Sweden, with 2400 tons; total 4850 tons.

THE steamship Dora was cleared from Fernandina on the 3d inst. with 2180 tons of phosphate, and the following vessels are loading: Steamship William Balls, with 2200 tons; steamship Ruabon, with 2400 tons; steamship Dingwall, with 2500 tons, and bark Detta, with 800 tons, making a total to the 7th inst. of 7900 tons of phosphate rock.

THE Bellview Phosphate Co., near Bellview, Fla., is busy shipping phosphate. The company is 200 tons behind in its shipments, and is refusing orders on account of the rush.

THE Detrick Fertilizer & Chemical Co., of Baltimore, was incorporated on Monday last by Louis F. Detrick, W. H. Detrick, W. G. Miller, N. Rufus Gill, of Baltimore, and Robert T. Bicknell, of Boston, Mass. The specified capital stock is \$100,000, in 1000 shares of \$100 each.

THE steamship Martos, which cleared from Savannah last week, had among her cargo 1000 tons of phosphate taken on at Tampa, Fla., for St. Louis de Rhone, France.

THE British steamers Dora and Hessele left Fernandina on the 2d inst. for Stettin, Germany, loaded with phosphate, and a wager of \$50 was made as to which would reach her destination first. The Hessele takes the route north of Scotland and the Dora goes through the English Channel. They were loaded by the Dunnellon Company.

THE Deacon and Stranathan Phosphate Companies, of Marion county, Fla., are working up to their full capacity. They are busy shipping phosphate to fill contracts made some months ago. Their business for February aggregated a very large tonnage.

It is estimated that this year the fertilizers used in Georgia will amount to 300,000 tons, South Carolina 120,000 tons, North Carolina 110,000 tons, Tennessee 90,000 tons and Alabama 60,000 tons.

THE report of the Alabama department of agriculture as to the sale of fertilizer tags for the past five months of this season shows an increase of nearly 20 per cent. over the same period of last year, although it is nearly 10 per cent. less than the sales were for the same months of the season before last. These sales are as follows: Season of 1890-91, \$46,963; season of 1891-92, \$35,000, and season of 1892-93, 41,674. These sales indicate that there will be an increased acreage this year over last year, but a decrease as compared with the season before last.

THE Cummer drying plant which has been erected at the Stonewall Phosphate Co.'s mines, near Blue Springs, Fla., is now about ready for active operations. The company will add about forty hands to their present force.

THE Homeland Pebble Phosphate Co., on Peace river, Fla., are shipping phosphate from their mines, the spur of railroad having been completed to connect with the Florida Southern Railroad at Homeland, Fla.

Mexican Notes.

Gustav Huess and R. K. Stolt have purchased the Vista Hermosa hacienda, situated in the district of Tuxtepec, Mexico. The area of the property is 10,000 acres, and it has already 60,000 coffee plants from two to three years old. It has extensive sugar machinery and about 1000 cattle. It is intended to grow tobacco and sugar upon it, as well as coffee. Mr. Stolt, who for

about ten years held prominent positions on the Mexican Central Railroad, will reside upon the hacienda and manage it.

A PARTY of Americans have just completed a trip on horseback from Tampico to Vera Cruz along the shores of the Gulf of Mexico for the purpose of examining the asphaltum deposits. It is said that they have purchased a number of those making the best showing, and intend to develop them immediately.

As a result of the excursion of American manufacturers into Mexico a number of prominent firms have established agencies in the City of Mexico, and others have purchased large tracts of coffee and other agricultural lands which they intend developing.

THE decision of the Mexican government in regard to abolishing the free zone has given general satisfaction along the Rio Grande border, as it is expected that it will result in the establishment of extensive manufacturing concerns and other industries on this side of the river. Under the present restrictions, an essential feature of the zone libre regulations, articles manufactured within the zone on introduction into the interior have to pay the same duty as if imported from foreign countries.

THE Mexican government is determined that the Tehuantepec Railway shall not under any circumstances pass into the control of foreign corporations. Propositions made by a French syndicate for renting the railroad will not be considered until after the construction shall have been finished.

W. K. OWEN, promoter of the Topolobampo co-operative colony scheme, says that all differences between the leaders of the colony are now settled and a plan for organization will shortly be put forward. Michael Flurscheim, a millionaire manufacturer of Switzerland, has disposed of his business and is about to devote himself to the development of the colony. The prospects of the enterprise seem brighter than ever.

It is now definitely decided that the Mexican International Railroad will be extended to Durango and thence across the Sierra Madre Mountains to the Pacific coast. It is also the intention of Mr. Huntington to build a line to Guadalupe and finally to the City of Mexico.

UPON the recommendation of Chief Engineer Vrotnotzmy the Mexican government will extend the north jetty of the new harbor work at Tampico 1000 feet further out. Upon the completion of this all obstacles in the way of permanent deep water will be overcome. The present jetty work has been remarkably successful, and caused the business of the port to increase until it now stands fifth in importance of the thirty-five ports in Mexico. The amount in customs collected at Tampico during the month of January was over \$91,000. The amount in customs collected at Vera Cruz for the same month was \$800,000, and at Nueva Laredo \$145,000.

THE policy which President Diaz has been urging upon the Mexican Congress regarding the improvement of harbors is to be carried out, and a large amount of money has been appropriated for this purpose. The government dredge-boat has arrived at Vera Cruz, and will be put to work dredging that harbor, while other extensive improvements are being made at the same place. There are already extensive improvements in progress at Mazatlan, the principal port on the Pacific coast, and at Coatzacoalcas, on the Atlantic. The completion of the Tehuantepec Isthmus Railroad is expected to make Coatzacoalcas one of the most important ports in Mexico.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

Exports of Cottonseed Oil, Cake and Meal.

During the seven months ending January 31, 1893, our exports of cottonseed oil to different countries was as follows, 1892 being also given for comparison:

Destination.	1893. Gallons.	1892. Gallons.
United Kingdom.....	654,422	542,608
Germany.....	457,115	555,873
France.....	1,000,917	1,859,059
Other countries in Europe.....	3,160,735	4,199,714
British N. Amer. possessions.....	217,228	121,017
Mexico.....	171,899	35,102
Cuba.....	53,433	31,666
Puerto Rico.....	171	1,650
Santo Domingo.....	12,210	1,903
Other W. Indies & Bermuda.....	128,588	108,847
Brazil.....	192,523	69,157
Other countries in S. America.....	79,337	29,166
Asia and Oceania.....	20,674	8,218
Other countries.....	15,975	8,596
Total.....	6,232,416	7,908,309

During the same period the exports of oil cake and oil-cake meal were as follows:

Destination.	1893. Pounds.	1892. Pounds.
United Kingdom.....	207,917,920	246,480,590
Germany.....	159,446,472	113,773,749
Other countries in Europe.....	121,895,670	83,947,530
British N. Amer. possesss.....	1,200,910	530,338
W. Indies and Bermuda.....	6,879,311	5,202,966
Other countries.....	234,097	372,780
Total.....	497,531,548	430,027,923

The Cottonseed-Oil Market.

NEW YORK, March 15.

Within several days from fifty cents for prime crude cottonseed oil the market has dropped to about forty-five, and there is only one buyer here at this price, while prime yellow has an uncertain value in the absence of any buying interest whatever, except in the customary small lots distributed from store; it may be called in a nominal way fifty-six to fifty-seven cents. The lard refiners here are out of the market, and there are no indications of their coming in in the near future. The state of trade abroad is very dull, and the desire for fresh investments in American products is of a very restricted character. This is the reason for the apathetic condition of affairs here, not only in oil, but in general produce, with the rapid falling off in values of articles that had only recently been excited to extreme figures. The fact that oleo-stearine and tallow are much cheaper for the week, or at nine cents and six cents, respectively, only points out the dullness in the compound lard, upon which the cottonseed oil rests as well this season, at least, for support. The course of the lard market has been almost steadily to a lower basis; in some degree this declining tendency has been of a legitimate character, as the supplies of hogs have been much larger than the general provision trade had looked for.

It is plain that business in cottonseed oil must continue to suffer until the lard refiners get more trade from Europe. That some portion of the unwillingness of the foreigners to trade is due to the natural indifference as awaiting the financial policy of the administration at Washington is clear in letters from the other side, in which assertions are made that so long as comfortable stocks are held they will be drawn upon to disregarding offers to sell hence, no matter how low the price as an inducement. The compound lard, for instance, has been offered to the markets almost as low as nine and one-quarter cents. The first large installment of the oil bought abroad some time since was received this week, a lot of 2297 barrels yellow from the Mediterranean. This oil cost about as much as corresponding grades could be

bought for here at present, although at the time of its purchase it was considered a bargain. More will come forward, and to the amount stated in our previous reports. The only export interest here is for white oil, which is taken in small lots, but less readily than a fortnight since. The mills sold to the West at the close of last week a full line of oil, and got relatively decidedly better prices than those prevailing here.

HOPKINS, DWIGHT & CO.

A Quiet Oil Market in Memphis.

MEMPHIS, TENN., March 13.

The market at this point for cottonseed oil and its products may be called quiet at present, and the season for cottonseed is about over, while the crushers are at present engaged in reviewing the season's trade. Cottonseed by rail is quoted today at \$24.00, and by river \$22.00 per ton. The business to most of those engaged in this trade has been remunerative to a greater or less degree during the season, and only in certain cases where heavy contracts were made for future delivery has there been losses made. Among all the mills in and around this city only two are now running, and have perhaps stock enough to keep them employed for two months to come. Cottonseed has been scarce throughout the season, owing to short cotton crop, and also to the number of mills that have commenced operations throughout this and other sections of the country. Other mills on a very extensive scale are about being erected at Little Rock, Ark., and this likely will make the supply of seed short next year from that section; in fact, a number of mills are projected in Texas, so that our supply from that quarter will also fall short. The country now is almost entirely without seed, and in many instances farmers are buying for planting purposes, and city mills report sales to planters as high as \$30.00 per ton. Meal in car lots is steady today at \$23.00 for prime, and cottonseed oil in car lots is quoted at forty-nine cents for prime crude and fifty cents for summer yellow.

Cotton-Oil Matters in Memphis.

President Alston Boyd, of the Crescent Cotton Oil Co., Memphis, Tenn., writes us as follows: "The year's crush in this immediate neighborhood is about completed, and will be a very short one, as the cotton crop was only about half what is usually made. Owing to the scarcity of seed and the high price of oil, Memphis mills have this year been drawing seed from territory that they never before bought seed in, even going as far west as Texas. This mill alone bought nearly 1000 tons of seed in Texas. The profits of the business here depend altogether upon whether the mills sold their product promptly as made or held it. Those who held made a very fair return on their investments. Those who sold as fast as made, or still worse, sold ahead, have little or no margin of profit, and the mills that sold their product ahead were in many instances forced to close down on account of advance in the raw material consequent upon the rapid advance in oil. There will not be any new mills built in the Memphis district as far as we can learn. This company will put up another mill at Little Rock next season on the Argenta side of the river, which will be of sixty tons capacity the first season and likely double the second year."

A New Oil Mill at Houston, Texas.

Messrs. Swift & Co., of Chicago, and Nelson Morris & Co., of the same city, have purchased ample grounds at Houston Heights, near the Missouri, Kansas & Texas tracks at Houston, Texas, and will at once commence the construction of a \$100,000 brick cottonseed-oil mill which they will operate during the coming season. This plant will be one of three to be erected by the same company, the others

to be located, respectively, at Little Rock, Ark., and Waco, Texas. The main building here will be two stories high and 50x100 feet. The cotton-press-room will be 20x20 feet, two stories high. The mealhouse will be 60x125 feet, the boiler-house 40x42 feet and the ginhouse 20x30 feet, each of one story. There will be two seedhouses, each 80x250 feet, and the hullhouse will be 80x200 feet. Four iron tanks will be used for storage, and each will contain 900 barrels of oil. From 80 to 100 men will be employed. The Consumers' Oil Co., of Chicago, which is composed of the above-named Chicago firms, intends to utilize all the hulls and cottonseed meal for feeding cattle at its Morris ranch, and the oil will be shipped in a crude state to the refineries at Chicago and Kansas City, where it will be made into compound lard.

Three More Oil Mills for Texas.

Messrs. J. J. Culbertson and H. L. Scales, of the Corsicana Cotton-Oil Co., of Corsicana, Texas, have purchased ground and commenced the construction of three cottonseed-oil mills as follows: One at Ennis, Texas, with a capacity of seventy-five tons daily; one at Mexia of the same capacity, and one at Temple of 125 tons daily capacity. All the buildings will be of brick and stone, and the very latest and best improved machinery and appliances will be used throughout the different plants. Building material has been contracted for at the three points, and active work will be begun as soon as the material can be placed on the ground. Mr. Culbertson is now visiting the different makers of oil-mill machinery for the purpose of letting contracts. The plants will be built in accordance with insurance companies' plans and specifications.

Soap from Cottonseed Oil.

The following account given in a communication to the *American Soap Journal* of how this oil is employed by a practical soapmaker contains much information upon this point which is of a useful nature. The question of how much soap a given quantity of tallow will make is often a difficult point to gauge. In the following method one of the advantages claimed is that the yield of soap agrees with calculated yield. 180 pounds of fat giving 535 pounds of clear, waxy soap. The formula given below has been successfully used for eighteen months:

	Pounds.
Refined cottonseed oil.....	164
Tallow.....	16
Resin "K".....	75
Silicate of soda "N".....	75
Palm oil.....	1
Caustic lye, 35° B.....	153
Starch.....	3 3/4
Sal-soda.....	5
Silex.....	40
Water.....	1 1/2
Perfume.....	1
	535

The method adopted for working up this formula is as follows: Commencing with cooling frame, the materials are framed, thus avoiding framing the soap. This necessitates the use of a good, tight frame in which the cottonseed oil, palm oil and tallow, carefully weighed or measured according to the proportions given above, are placed, having first been warmed to a temperature of 115° F. The resin, previously warmed and cut with a small amount of weak lye to keep it fluid, is then added.

The frame is now rolled under the mixing machine, which has movable shafts and blades. These mixer shafts are lowered into the foregoing mixture and set in motion. The caustic lye and the sodium silicate are now added and the mixture stirred for seven to ten minutes, when the starch and sal-soda and silex are added, and the whole stirred for another four or five minutes. The mixture should then have a glossy and smooth appearance, indicating that the incorporation is complete. The perfume is added, the mixing blades re-

moved and the frame set aside to cool. The soap will be quite hard in a reasonable length of time. It may be stripped on the second day and cut upon the third. The difference in cost between tallow and cottonseed oil introduces the element of economy, while there is no loss save the moisture which evaporates during the three days' cooling, no spent lye and no nigras. Lastly, the soap is found to do good work in actual use in the wash-tub, containing less moisture than there usually is in boiled and settled soaps.

Bastrop Cotton-Oil Co.

A meeting of the cotton-oil men of Bastrop, Texas, was held at the First National Bank in that town on the 7th inst. W. C. Powell was elected temporary chairman, and J. M. Myers, secretary. Five trustees to act for subscribers to stock in the Bastrop Cotton-Oil Co. were elected as follows: W. C. Powell, P. O. Elzner, W. E. Goodman, Louis Ellers, Jr., and D. B. Orgain, with Louis Ellers, Jr., as secretary to the trustees. By a unanimous vote the trustees were entrusted with power to contract with E. Van Winkle for a 30-ton capacity cotton-oil mill to be erected in Bastrop, and to be in active operation on or before September 1st, and not later than the 15th. The name of the organization is the Bastrop Cotton-Oil Co., and the capital stock is \$45,000. The subscribers to stock present at the meeting were: D. Boaz, P. O. Elzner, W. E. Goodman, J. M. Myer, S. F. Green, W. A. McCord, B. D. Orgain, Louis Ellers, Jr., Chester Erhard, E. Van Winkle, Dr. H. P. Luckett and W. C. Powell.

Cottonseed-Oil Notes.

COTTONSEED products at New Orleans are in good request, and the market steady at quotations as follows: Cottonseed, \$20.00 per ton (2000 pounds) delivered; cottonseed meal, jobbing at depot, \$25.00 per short ton, and \$26.00 to \$27.00 per long ton f. o. b. for export; cottonseed oil, in barrels, 50 to 52 cents per gallon for strictly prime crude, and 60 cents for refined oil; oil cake, \$26.00 to \$27.00 per long ton f. o. b.; soap stock, 1 1/4 to 1 1/2 cents; foots, 2 cents bid; linters, A, 5 to 5 1/2 cents; B, 4 to 4 1/2 cents; C, 2 3/4 to 3 cents; ashes, \$17.00 to \$18.00 per ton for sifted f. o. b. Hulls delivered at 25 to 30 cents per 100 pounds, according to location of mills.

THE citizens of Roanoke, Ala., are about to erect a \$12,000 cottonseed-oil mill in the near future.

THE Bowie Cottonseed-Oil Co., to be located at Bowie, Montague county, Texas, has been chartered with a capital stock of \$50,000. The following are the directors of the company. Daniel Waggoner, Thomas Waggoner, S. A. Lillard, Julia F. Halsell and H. H. Halsell, all residents of Decatur, Texas.

THE Grandview Cottonseed-Oil Mill Co., of Grandview, Johnson county, Texas, has been chartered with a capital stock of \$40,000. The directors are N. F. Watts, J. E. Walker, W. G. Davis, G. A. Harrell, W. L. Knight, S. S. Ramsey and F. E. Davis.

THE Charlotte Oil & Fertilizer Co., of Charlotte, N. C., has abandoned the idea of putting up an oil plant this season. The run of seed is too late to warrant the use of the time. There has been 20 per cent. more cottonseed on the market up to date than for the corresponding period last year.

DUFFY & SMITH will close the contract on the 18th inst. at San Marcos, Texas, for a site on which to erect a \$40,000 cottonseed-oil mill, and the joint stock company which was to erect a \$35,000 cottonseed-oil mill will erect a compress instead.

A NEW oil mill is to be built in Sumter county, S. C., by a company which has just been organized by Henry Bloom, of Sumter.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department, on pages 137 and 138.]

Railroad Matters in Texas.

DALLAS, TEXAS, March 11.

It is officially given out that the Chicago, Pacific & Rock Island Railroad people have let the contract for the construction of 100 miles of road to be built at once. This projected line will extend from the present terminus of the road at Bowie via Fort Worth to Dallas. The officials of the road have been here taking preliminary observations in regard to an entrance to the city, and while one report has it that they think favorably of coming in over the grade that was thrown up some four years ago for a distance of fifty miles to the northwest for the Dallas & Southeastern Railroad, on which no iron was ever laid, a counter report is to the effect that definite arrangements have been made with T. L. Marsalis for the purchase of the West Dallas Elevated Railroad. However this may be, it is understood that the line will be completed and in operation to Dallas by the end of summer, and that without delay the road will be extended from here into the pine forests and lumber regions of the southeast, either absorbing or paralleling the Texas Trunk Railroad, which has long been a dog in the manger to all efforts to get a northwest and southeast line of road, giving direct connection between the saw mills of the southeast and the rapidly developing timberless sections of the northwest. Communication between these two sections of the State is now and has always been in the most roundabout way conceivable, and subject to many delays and much uncertainty, so much so, in fact, that the building of the Rock Island road will practically open up a considerable amount of new territory to the wholesale and jobbing trade and manufacturing interests of Dallas and Fort Worth, the trade of which territory has heretofore gone to New Orleans, St. Louis, Kansas City and Denver on account of quicker service and superior railway advantages possessed by the latter cities. It is the intention to ultimately extend this southeastern line of the Rock Island to the Mississippi river, in all probability to New Orleans.

The citizens of Dallas are jubilant over the prospect of the coming of the Rock Island, which will reach here about the time it is expected the city will begin to reap results from the navigation of the Trinity river. The gentlemen having this navigation project in charge say that they will have an open river all the way to Galveston within sixty days, and within a short time thereafter they expect all the railway lines will put on water rates from all points to Dallas. A rate of from fifty cents to one dollar per bale on cotton from Dallas to Galveston will unquestionably concentrate all the cotton in a radius of 100 miles here, which may be readily inferred from the fact that the customary rate for the same haul averages about two dollars and fifty cents under the present arrangements.

The injunction of the railroads of the State against the railroad commissioner, which was filed in the Federal Court in New Orleans about a year ago, will come up for final adjudication before the Federal Court at Austin on the 20th inst. Under the commission law the commissioners are invested with exclusive legislative and judicial authority in all matters appertaining to railway rates, etc., which practically places the commerce of the State in the arbitrary power of three men without any experience whatever in the business of transportation and without the reputation of having extraordinary intuitive insight into matters in general. The railroads

hold that these extraordinary and exclusive powers with which the commission is clothed are unconstitutional, and it is upon this ground that they seek to perpetuate the injunction.

While there is a wide diversity of opinion as to the good or harm the commission has done the business of the State, there is no question in the mind of anybody but that it has been an apple of discord in the political arena. It was the most effectual means ever tried in Texas for stirring up the prejudices of the farmers and working people and arraying them against capital. Governor Hogg was elected in 1890 on the commission plank in the San Antonio platform and his war on railroads, and was re-elected last fall as an endorsement of his course. Whatever may be the intrinsic merits of railway commissions in the commercial economy of the country generally is beside the question in the case of the Texas commission, which, as has been thoroughly demonstrated by its acts, is nothing more nor less than a very useful department in the political machine.

The attorneys for the various railway lines interested are here making arrangements to put up the best fight in their power to make the injunction perpetual.

The Houston & Texas Central.

An order lately granted by Judge Jackson, of the United States Supreme Court, in the case of Carey et al. vs. the Houston & Texas Central Railway, in the Circuit Court of New Orleans, provides for a stay of further proceedings to allow action against the receiver for an accounting and for his removal.

There were instituted some time since foreclosure proceedings in the United States Circuit Court at Galveston against the Houston & Texas Central Railroad to sell out its railroad and a large land grant, amounting in the aggregate to about \$400,000. The stockholders intervened in said foreclosure proceedings, alleging that said proceedings were without jurisdiction and were fraudulent and designed to turn the property over to the Southern Pacific Company.

This action is pending an appeal in the Supreme Court of the United States. Notwithstanding the appeal, motion was made in the court below to turn the property over to the alleged purchaser at the foreclosure sale. It is to prevent this that the order of Judge Jackson was made. The stockholders claim that the lower court had no jurisdiction to decree a sale of the mortgages before they were due, or without any inquiry of any kind concerning the amount due, and that the judgment was for a million and a-half in excess of all the debts of the company, matured and unmatured.

Railroad Notes.

THE answer filed by the defendants in the suit by the Richmond & West Point Terminal Railway & Warehouse Co. against John Inman and others denies that there was anything improper in the transaction by which the control of the Georgia Central was turned over to the Terminal. This deal was made in November, 1888, by the sale to the latter of nearly all the securities of the Georgia Company which controlled the Georgia Central. Receiver Oakman, of the Terminal, it will be recalled, brought the suit to recover a considerable sum said to have been lost to the company because of improper actions of the defendants who made the deal.

CHARLES A. COOMBS, of Baltimore, who has been acting president of the Annapolis & Baltimore Short Line Railroad Co., has been appointed receiver of that company by Judge Morris, of the United States Court at Baltimore. The application was made by owners of 410 of the 500 first mortgage bonds of the company for \$1000

each. The interest has been in default and it is likely that the road will be ordered sold. It runs from Baltimore to Annapolis, a distance of twenty-eight miles. In addition to the first mortgage indebtedness of \$500,000, the company has a second indebtedness of \$500,000 and a capital stock of \$500,000. The prospects are that in the adjustment of its affairs it will amalgamate with the Maryland Steamboat Co.

EARNINGS of South Carolina railroads are beginning to evidence an improvement. The January statement will show only about eight roads with decreased earnings in comparison with the same month of 1892. The returns so far show eighteen roads with increases. The December statement had fourteen roads with increases and twenty-four with decreases.

THE Lynchburg & Durham stockholders at their meeting on March 23 will ratify the agreement under which the Norfolk & Western secured that road. This will give the Norfolk & Western full possession of the property.

THE Union Belt Railroad at Memphis, Tenn., which the Louisville & Nashville is credited as wanting to buy, was built by the Union Railway Co. in the interests of the merchants and manufacturers of that city. Under its franchise any railroad entering Memphis can use its tracks at an annual charge of 3 per cent. of the total cost of the railway. The company hopes to soon have its entire line completed, which will give connection with every railroad in the city, and also with the Mississippi river. The proposed sale is denied by its officers.

It is rumored that the Norfolk & Western has purchased the Bristol, Elizabethton & North Carolina Railroad. The road is built from Bristol, Tenn., to Elizabethton, Tenn. It is said that the Norfolk & Western will use this road to enter western North Carolina.

THE foreclosure sale of the East & West Railroad of Alabama will be held at Birmingham, Ala., on April 10. The road extends from Cartersville, Ga., to Pell City, Ala., 116½ miles. F. S. Ferguson, of Birmingham, is special master.

THE extension being built from Jacksonville, N. C., to New Berne, N. C., by the Wilmington, Onslow & East Carolina Railroad Co., will very likely be finished in May. It will be about thirty-one miles long and traverses a rich truck-growing region.

AT the annual meeting of the Fort Worth & Denver City Railway, held at Fort Worth, Texas, March 7, the following officers were re-elected: Morgan Jones, of Fort Worth, president; G. M. Dodge, of New York city, vice-president; S. H. H. Clark, of St. Louis, Mo., second vice-president, and J. G. Jones, Fort Worth, treasurer.

THE Chesapeake & Ohio Railroad is making arrangements to do an immense export business this year. It is the intention to have a steamship sail every week from Newport News to London, Liverpool and Glasgow. These ships will be able to carry 300 carloads of grain and flour, besides cattle and other live stock, nearly all of which will be shipped from the West via Chesapeake & Ohio.

THE Chesapeake & Ohio Railway Co. has listed at the New York Stock Exchange \$155,000 additional 5 per cent. first consolidated mortgage gold bonds. These have been issued in exchange for a like amount of equipment bonds paid off.

THE Central Trust Co., of New York city, through its attorney, Henry B. Tompkins, has filed a petition at Atlanta, Ga., for a co-receiver for the Marietta & North Georgia. This action is the outcome of a meeting held in New York not long since in regard to the reorganization. The co-receiver is desired to look after improve-

ments and monetary matters as relating to construction and the purchasing of new material. Elias Summerfield is endorsed for the position.

A. J. FRAZIER, formerly trainmaster of the Ohio & Mississippi at Seymour, Ohio, has been appointed superintendent of the Alabama Great Southern at Birmingham, vice James McCarthy, resigned.

THE stockholders of the International & Great Northern Railroad Co. hold their annual meeting at Palestine, Texas, on April 3.

RECEIVER COMER, of the Georgia Central, states that the reason why the interest was defaulted on the Macon & Northern is because that road has barely earned running expenses, and as the Central has not been able to meet its own obligations, it could not supply the deficit.

W. A. LOVE has been appointed trainmaster on the main-stem division of the Georgia Central west of Macon, with headquarters at Griffin, Ga.

THE final instalment of the purchase money for the Baltimore & Drum Point Railroad, which was sold several months ago by order of the court to Edward Lauterbach, of New York city, and Wm. T. Biedler, has been paid. The same parties have also purchased \$400,000 of the bonds of the road. They expect to reorganize the company and resume the work of construction. The line is projected from Baltimore to Drum Point, Md., a distance of eighty-one miles, and is partly graded.

JUDGE GOFF, of the United States Circuit Court at Baltimore, has granted permission to the receivers of the Richmond & Danville to issue receivers' certificates to the amount of \$100,000 to purchase and operate a line of barges on the Mississippi river. The barges are to be employed in connection with the Georgia Pacific line, part of the system, and are to be operated from the terminus of the road at Huntington on the river to points as far south as New Orleans, the principal cargo to be coal from Alabama mines. The Georgia Pacific taps nearly all the large coal mines in the Birmingham district either with its main line or by branch roads. It has a direct line to Greenville and Huntington, Miss., where much money has been spent in providing coal tipples and other facilities for loading coal on barges in the Mississippi river.

AT the recent annual meeting of stockholders of the Mississippi Valley road, of Arkansas, James W. Edwards, of Memphis, Tenn., was elected president; B. B. Waddell, vice-president, and C. E. Armstrong, secretary and treasurer. Some improvements and extensions are contemplated.

A HANDSOME new structure has taken the place of the union depot at Macon, Ga., destroyed by fire some time ago. The building is of a thoroughly modern style and is provided with all requisites for handling traffic.

THE Orange Belt Railway, of Florida, was lately sold at Jacksonville, Fla., under a court order to J. P. Jesley and J. S. Clark for \$150,000.

THE annual meeting of the stockholders of the Atlanta & Charlotte Air Line Railroad Co. was held in New York city on March 8. More than 32,000 shares were voted, exceeding in number any previous meeting. The following board of directors was elected for the ensuing year: Eugene Kelly, P. P. Dickinson, Richard Irvin, R. H. Rochester, Charles M. Fry, Charles S. Fairchild, Ebenezer S. Mason and B. R. McAlpine, of New York city; H. B. Sibley, of Rochester, N. Y.; Joseph Bryan, of Richmond, Va.; Skipwith Wilmer and Michael Jenkins, of Baltimore; D. J. Garth, of Scarsdale, N. Y. The new board of directors met immediately after the election and elected Eugene Kelly president, and W. N. Wilmer vice-president.

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BALTIMORE, MARCH 17, 1893.

Notice to Advertisers.

*The last forms containing advertisements
are closed on Tuesday afternoon. New adver-
tisements or changes should be received not
later than Tuesday noon to ensure attention
in the issue bearing date of the following
Friday. Reading matter should be in our
office on Wednesday, although late news can
be received early Thursday morning.*

A GOOD illustration of the rapid appreci-
ation in values of property in New
Orleans is shown in a sale of 616 acres
recently consummated there. In 1890
this tract was purchased for \$33,000 and
now has been sold for \$160,000. No
more convincing evidence of the in-
creasing growth of this city could be
given.

GOVERNOR FOSTER, of Louisiana, has
called a State immigration convention at
New Orleans on March 21st for the pur-
pose of discussing the best methods and
most efficient means of inducing capital
and a worthy immigration to the State.
This will bring together representative
men from various parts of the State, and
as in connection with it there will be a
meeting to discuss the necessity of re-
ducing the cotton acreage, it is probable
that good results will follow.

THE awarding of the contract for fur-
niture for a schoolhouse in Harrisburg,
Pa., to a manufacturer in Roanoke, Va.,
is another striking illustration of the en-
croachment of Southern industries upon
the North. Harrisburg is less than 100
miles from Williamsport, the greatest fur-
niture manufacturing centre of the East,
while Roanoke is over 300 miles distant.
The placing of this contract with the
Roanoke firm implies an advantage in
that locality with which Pennsylvania
manufacturers cannot compete. And
this is but one instance of fre-
quently occurring events of similar
significance in many branches of South-
ern industry.

Southern Advantage in Cot- ton Manufacture.

The rapid growth of the Southern cot-
ton manufacturing industry threatens to
destroy the supremacy of New England
in the production of the coarser grades
of cotton fabrics, and this branch of the
industry must be eventually transferred
from New England to the South, where
the conditions are more favorable. This
fact is gradually securing recognition
among New England manufacturers,
and the first evidence of the apprecia-
tion of the situation has been given by
the Massachusetts Cotton Mills, of
Lowell, Mass., in the recent announce-
ment that this company intended re-
moving the coarser branch of its busi-
ness to the South, devoting the present
mills to the manufacture of higher
grades of goods. The facts in this case
have already been fully explained in
these columns, and the only occasion for
referring to it again is the emphatic tes-
timony of the treasurer of this company
before the labor committee of the Mas-
sachusetts legislature. The question
under consideration was the bill reduc-
ing the hours of labor in Massachusetts
mills to fifty-four per week. From the
report of this hearing in the Boston
Advertiser we quote as follows:

C. L. Lovering, treasurer of the Massachusetts
Mills, of Lowell, and of the Whittenton Mills at
Taunton, said he was absolutely driven out of the
State, and he is going South to build a mill in
order to hold his export trade. His goods can be
made in the South much cheaper than in the
North on the identical machine. The South is
gaining rapidly on the North, though he did not
believe the South would destroy Northern busi-
ness. Coarser goods will be made in the South,
and the Northern mills will be made over for the
manufacture of fine goods.

This is explicit enough, and there
need be no further question as to the in-
tentions of the Massachusetts Mills.

Southern conditions are exceptionally
favorable for the manufacture of coarse
cotton goods. Raw material can be
purchased more cheaply; there is a sav-
ing in freight; labor costs less, and its
value is not diminished by injudicious
legislation. The North cannot hold out
long against Southern competition in
coarse goods. There is no need for con-
sideration of fine goods at this time; the
present problem is sufficient. Others
will solve themselves as they arise.

A Chance to Reform Cotton Grading.

Mr. A. B. Shepperson, special agent
for the cotton exhibit at the World's
Fair, has requested the Memphis Cotton
Exchange to furnish with its exhibit of
the various qualities of cotton received
at that market a complete set of samples
illustrating the different kinds of stained
and tinged cotton. These are to show
the kinds of stains caused by frost dur-
ing wet and during dry weather, those
caused by rains following soon after a
frost and those from continued wet
weather during the season when the
crop is maturing. This, in connection
with the very complete exhibit of the
many grades of cotton which are re-
ceived in the Memphis market, will en-
able that city to make a very complete
cotton display.

It is to be hoped that the inspection
of the many samples of cotton which
will appear at the World's Fair may
lead to some action relative to improv-
ing the present unsatisfactory system of
grading in vogue throughout the coun-

try. Fully 50 per cent., or even more,
of the grades now recognized have no
bearing toward the spinning trade other
than that of giving an opportunity to re-
duce the price on a given cotton because
of some partly imagined defect. In fact,
this grading system is the stronghold of
the cotton buyer, as by it he can buy a
bale at a certain grade and sell it again
at the next grade higher. This is not a
supposition. It is a fact which can be
verified by an inspection of the books of
the majority of the cotton buyers in
different cotton markets. Even the
agents sent from England and other
consuming points to purchase and ship
to their principals make use of the pres-
ent grading system in the way stated.

It is quite apparent, therefore, that
this class of cotton dealers would use
every effort to prevent a change in the
grading system. The present one allows
many loopholes by which it is possible
to reduce losses should the market catch
them, or to add to profits on other
occasions. But to the planter it is a
source of very material loss. A differ-
ence of only one-tenth of a cent per
pound between grades would represent
over \$4,500,000 on last year's crop.
Possibly the actual loss to the farmer
was not so great as that, as there was a
steady decline in prices which caught
many over-bold speculators, but the fact
remains that an appreciable proportion
of the value of the cotton crop is lost to
the farmer through the middlemen's
jugglery with grades.

The basis upon which cotton should
be graded is the relative value of each
quality to the spinner. In the operation
of a cotton factory the trifling difference
between most of the present grades is
practically disregarded. Of course, there
must always be a certain separation into
grades, but the number now in use is so
great that to discern any difference be-
tween two samples in any of the infinite
number of sub-grades is purely a work
of the imagination, based upon nothing
more tangible than a more or less vague
recollection of a certain sample which is
seen possibly once a year in the rooms
of the Cotton Exchange.

While there is a wide difference be-
tween pig iron and cotton, yet in the
grading system of the former there was,
some years ago, about as much intelli-
gence displayed as there is today in
grading cotton. Prior to the meeting of
Southern furnacemen in Cincinnati in
1887 each furnace in the South had its
own peculiar system of grading, using
the same names as other plants, but giv-
ing a different iron. Pig iron, as is well
known, is almost universally graded by
the appearance of the grain when the
pig is broken. As graded in 1884 there
were Nos. 1, 2, 2½ and 3 foundry irons,
and frequently these were subdivided by
placing X after a number, indicating
better quality; then there were Nos. 1, 2
and 3 mill irons, one or two grades of
silvery mill, then mottled mill, mottled
and white iron, then two grades of sil-
very irons, which were often divided
into four grades, and the same with the
bright irons. Each of these grades
might be subdivided into numbers above
or below it to catch an order or fill a bad
contract. The system was absurd, and
instead of aiding foundries by giving
them distinct grades to work with, it
gave infinite trouble, because the minute
subdivision attempted could not be reg-
ular, and further, in ordering the same

grades from different furnaces, a foundry
never was certain what it would receive
until the iron was delivered. When the
new system was adopted matters were
simplified somewhat. The grades were
Nos. 1, 2 and 3 foundry, 1 and 2 mill,
mottled, white, open and close bright
and open and close silvery. With this
came the effort to adopt a standard for
No. 1 foundry, but as the appearance of
a so-called No. 1 foundry made at one
furnace from a given mixture is different
from that of the same grade made at
another plant, it has not been possible
to regulate this with any exactness, and
consequently iron grading is in a certain
measure guess-work, but far more accu-
rate in its results than the present sys-
tem of classing cotton. Pig-iron buyers
are beginning to specify what kind of
iron they want, and insist upon getting
it, and this is going to lead to a more
definite and accurate, and we may say
scientific, method of grading. Spinners
specify the grades of cotton which they
want, but the planter never hears of it;
the middlemen take it in hand and the
planter is the loser. It remains, there-
fore, for the latter either to secure more
direct communication with the actual
consumer of the staple or to insist upon a
classification of his crop which is in ac-
cordance with the real needs of the spinner.

At the World's Fair there will be
samples of cotton graded by cotton-
classers in most of the large markets of
the South, and there will be a good
opportunity to ascertain how the grades
stand in relation to each other. If Mr.
Shepperson would secure from some
of the principal cotton exchanges sam-
ples exhibiting the twenty-five grades
recognized by the New York Cotton
Exchange, and also the sub-grades,
nearly six hundred, into which these
may be and are divided, he would do a
good work and open the eyes of visitors
interested in cotton to the absurdity—
we might almost say dishonesty—of the
accepted classification.

Platt-De Bardeleben.

The resignation of Hon. T. C. Platt
from the presidency of the Tennessee
Coal, Iron & Railroad Co., which took
place at the meeting of the board of
directors in New York on March 13, is
an act which has been predicted ever
since the De Bardeleben interests were
merged into this company. Under Mr.
Platt's management the affairs of the
company have prospered to a greater
degree than could be even hoped for,
in view of the severe and continued
depression which has existed in the iron
market, and through his instrumentality,
in connection with Mr. De Bardeleben,
has been brought about the consolida-
tion of the De Bardeleben Coal & Iron
Co. and the Cahaba Coal Co. with the
Tennessee Coal, Iron & Railroad Co.,
making the latter one of the largest
companies in this country and a power-
ful factor in the iron trade of the South.
Throughout his management Mr. Platt
has shown wisdom and ability, and no
higher compliment can be paid him
than the statement that the company
has been able to pay its fixed charges
and its liabilities, dividends on its pre-
ferred stock, and to lay aside a surplus
of \$400,000 during the past year. The
annual meeting of the company takes
place on April 4, and until then Mr.
Platt will serve in his present capacity.

While no authoritative statement has been made as to who the next president will be, it is generally understood that Henry F. De Bardeleben will be elected.

Mr. De Bardeleben is a well-known figure in the Southern iron and development interests. Almost since its inception he has been one of the leading spirits of Birmingham's growth, and when, later on, he started the town of Bessemer, he displayed in the work an amount of activity which nearly convinced Birmingham people that he was going to succeed in carrying out his threat of absorbing Birmingham into Bessemer. The De Bardeleben Coal & Iron Co., which was the parent industry of Bessemer, grew under his management from the original two furnaces to four, then five, and finally, by the absorption of the Eureka plant, to seven, at the same time increasing its already extensive holdings of coal and iron-ore lands, and finally becoming itself a part of the present Tennessee Coal, Iron & Railroad Co. In all of this work Mr. De Bardeleben has been the leading spirit, and it may be said that no man more familiar with the iron interests in Alabama could assume control of the Tennessee Company.

Since the question of making steel is in a fair way of being solved, judging from the success of the experiments carried on by officials of the Tennessee Company at the Jefferson Steel Works in Birmingham, the statement made at the directors' meeting that a steel plant would be shortly erected near Birmingham has new significance, and the well-known opinion of Mr. De Bardeleben that such works must be built and tried on a commercial scale in order to prove beyond doubt what can be done, as well as his strong leaning toward Bessemer as a suitable place at which to erect the plant, justifies the opinion that within a short time arrangements will be in progress for a well-equipped steel plant at Bessemer.

THE little town of Elizabethton, in Tennessee, is steadily adding to its industries, and in a quiet way growing surely and steadily. The shoe factory recently completed is in operation, and turns out many dozen pairs of shoes each day, employing nearly seventy-five hands. Three planing mills are now working, and the foundations have been commenced for a large twine factory, which, when completed, will be one of the largest in the country. The building will be some six hundred feet in length and contain the latest improved machinery for its purposes. The Watauga Inn, which is greatly needed for the accommodation of visitors, is now under good headway, and will probably be completed during May or June. Arrangements have been made to begin erecting a large cotton factory, and shortly afterward a furniture factory will be secured.

It is understood that within a short time work on the electric railroad between Richmond and Petersburg, Va., will be commenced and pushed to completion without delay. At present the company is waiting for a franchise, which is now under consideration by the Manchester city council.

NEW HAVEN, CONN., February 25.
Editor Manufacturers' Record:

We take pleasure in renewing our contract with you. We have a great many inquiries coming from our advertisement with you, and receive great pleasure and instruction from reading your able articles on the topics of the day.

THE BELDEN MACHINE CO.

CORRESPONDENCE

Sandwich Islands and Sugar Bounty.

STAUNTON, VA., March 13.

Editor Manufacturers' Record:

[Extract from Willett & Gray's *Sugar Trade Journal*, issued February 9, 1893.]

The annexation of the Sandwich Islands, which is now being agitated, is really quite a question of sugar tariff. For fifteen years, up to April 1, 1891, under the reciprocity treaty with the islands, the United States virtually paid the sugar producers of those islands a bounty of two cents per pound, amounting to about \$5,000,000 per annum. Since April 1, 1891, the islands have lost this bounty, and the United States is paying it instead to our own sugar producers.

The Sandwich Islands will not accept from us any annexation or protectorate, or what not, that does not give them again this \$5,000,000 bounty on sugar; hence the question becomes in reality a tariff question, and should be considered in connection with the general revision of the tariff when the subject is before Congress.

Carl Spreckles was probably the largest beneficiary under the reciprocity treaty above alluded to. When on April 1, 1891, the treaty was abrogated and the bounty act passed, he built the largest refinery in America at Philadelphia, which he subsequently sold to the American Sugar Refinery Co. He also entered upon the growing of beets and manufacture of beet sugar in California, where he now is the largest manufacturer of beet sugar in the United States, the factory being doubled in capacity last year, and said to have handled 60,000 tons of beets during the last campaign. It is reported that the factory is to be doubled before the next campaign. This will probably depend on the action of the incoming Congress on the present bounty.

After the abrogation of the reciprocity treaty with the Sandwich Islands the sugar industry there languished and was rapidly being abandoned, notwithstanding the climate is said to be the best in the world for cane rich in sucrose, and labor much lower than in the United States.

Thus it seems sugar from the Sandwich Islands was the means of taxing the people of the United States \$75,000,000 previous to April 1, 1891, when the bounty of two cents per pound paid the Sandwich Islands was transferred to the producer in the United States. Since then the industry has thriven among us as never before, until since the last election, when a removal of the bounty is threatened and a small revenue duty is to be substituted. Prior to April 1, 1891, for an indefinite time, the people of the United States have directly or indirectly taxed one of the most beneficial articles of food known, to their own discomfort and injury, largely to the benefit and welfare of foreign nations, as was the case in the Sandwich Islands. This course has built up the beet-sugar industry in Europe as it did in the Sandwich Islands, notwithstanding the natural conditions for growing the products for making sugar in the United States are excelled nowhere else on the globe.

Since the passage of the bounty act, April 1, 1891, and the constantly increased development of the sugar industry in the United States, the sugar industry in Europe and elsewhere has begun to show a decline; it is claimed in Europe it has reached highest point of development.

European nations could withstand the competition of low wheat, etc., which we send them as long as they paid us back with sugar—it was their only salvation; and now that the American farmer, prostrated by discriminative and destructive legislation for him, but which has built up a large and prosperous industry for the foreign farmer and manufacturer, just as daylight begins to dawn to him, another turn of the political kaleidoscope, and he sees a dark future, notwithstanding nature offers equal advantages to him as to the European sugar producer. He says: "Give me a short experience, a limited time in which to learn and establish this industry on a

safe footing, and then I will ask no odds or assistance from anyone." Will the incoming administration destroy the only hope and salvation of the farming community—reduce the consumption of the most harmless, healthy and nutritious article grown? We suppose the cause of the recent revolution in the Sandwich Islands will soon be better known. At present it looks like a sugar insurrection against legislation which has transferred hundreds of millions of dollars from the pockets of the sugar producers in the Sandwich Islands to the consumers and producers of sugar in the United States.

O. K.

Bids for the Locks and Dams on the Kanawha River.

WHEELING, W. VA., March 12.

Editor Manufacturers' Record:

Bids have been received and opened for the construction of locks and dams Nos. 9, 10 and 11 of the Great Kanawha, West Virginia, improvement. The lowest bidder for Nos. 10 and 11 was found to be unsatisfactory by the resident engineer, Mr. A. M. Scott, and further bids for those two pieces of the work will be asked for. The figures for the three pieces of work are quite interesting, and will no doubt very largely guide those who make proposals under the new letting. The bids are given below. The site for lock and dam No. 9 is twenty-five miles from the mouth of the river, at a point very well suited for the purpose naturally. The lock will be 411 feet long, 342 feet between quoins and fifty-five feet wide in the chamber. The dam will be movable, and will consist of a navigation pass 248 feet long, a centre pier and a wier 300 feet in length. The bids for lock and dam No. 9 are as follows: Zimmerman, Truax & Sheridan, Duluth, Minn., \$283,344; Humphrey Devereaux, Shawneetown, Ill., \$287,712; Thomas Munford, Lock 7, W. Va., \$296,950; Carlin, Stickney & Cran, East Saginaw, Mich., \$322,385; Harrold & McDonald, Pittsburg, Pa., \$322,560; Joseph Gianini, Allegheny, \$329,272. No. 10 is located nineteen miles from the mouth of the river. The lock will be 342 feet between quoins and fifty-five feet wide. The dam is movable, the navigation pass 248 feet long and the wier 290. The bids for this work are as follows: Humphrey Devereaux, \$230,053; Zimmerman, Truax & Sheridan, \$242,500; Joseph Gianini, \$243,339; Thomas Munford, \$244,479; Harrold & McDonald, \$247,416; Carlin, Stickney & Cran, \$254,215. No. 11 will be a much larger and more costly piece of work than either of the others, and is located about two miles from the mouth of the river. The navigation pass will be 304 feet long, the wier 380, and the other parts proportionately large. The bids for this piece of the work were as follows: Humphrey Devereaux, \$488,725; Charles McDonald, \$508,690; Zimmerman, Truax & Sheridan, \$562,119; Carlin, Stickney & Cran, \$580,070; Gianini, Foley & Theis, Pittsburg, Pa., \$681,370. The appropriation for this work is sufficient to complete it, amounting to a little over \$1,000,000 available. The building of these three dams will give slack water in the Kanawha river from the mouth to Kanawha falls, and will render the stream navigable at all seasons. The securing of this was one of the chief aims of the public career of the late Senator Kenna, and the work will stand a monument to his memory.

Good Business Conditions in Harriman.

HARRIMAN, TENN., March 10.

Editor Manufacturers' Record:

Business for the month ending today has been more active than for several months past. Lumber sales have increased over last month; iron products are selling well; agricultural implements find ready market at good prices; collections are about the same as last month; bank deposits more

than ever before in the history of the city. The general condition of trade is very good, and, with the election on the 9th inst. authorizing the issuance of \$110,000 of bonds by the city for the purpose of constructing and maintaining water and electric-light plants and a sewerage system, the prospects are brighter than ever.

ALFRED E. P. ROCKWELL,

Secretary Chamber of Commerce.

Iron Works Moving to Alexandria.

ALEXANDRIA, IND., March 13.

Editor Manufacturers' Record:

Alexandria has just captured the most important industrial enterprise ever brought into the natural-gas region. This is the New Albany Rail Mill, which is to be removed from New Albany, Ind. While the contract for the removal of this great plant was practically closed several weeks ago, the final details have just been settled. This company is controlled by the De Pauw family, who are also the principal owners of the immense plate-glass works which are being moved from New Albany to Alexandria. By the terms of the contract for the removal of the rail-mill plant the company binds itself to have 400 workmen engaged in the erection of its buildings within sixty days, and to go into operation by August with 1000 mechanics and increase this number within twelve months to 2500. This is one of the leading concerns of the West, and its New Albany works have a capacity for 35,000 tons a year of finished iron and steel. The new plant here will have a very much larger capacity, and will be one of the greatest manufacturing concerns in the State. That Alexandria was selected in preference to every other town in the gas region simply adds emphasis to the supreme advantages of this place, and is an additional proof that this is to be the greatest industrial centre in the whole State.

A contract has been closed for another enterprise of almost equal magnitude, but the particulars cannot be made public yet. Several small concerns to employ from fifty to a hundred hands each have been secured within the week, the managers of the various land companies operating here believing that it is as important to encourage the location of small enterprises as large ones. So great is the diversity of the industrial interests now centring here that a depression in one line of business would not cause any serious injury to the town, as has often been the case where, in an iron-making town, for instance, a dull iron market would create a general depression in business. Moreover, the large enterprises here and coming here are backed by an abundance of capital, and are not seeking this place because of any bonus, but because free fuel enables them to produce at the lowest possible cost, and then the distributing facilities are of the very best character, while within a radius of 300 miles there are 20,000,000 people, or nearly one-third of the country's population, thus furnishing a home market for all manufactured goods.

The Alexandria Company is doing all in its power to encourage house building, as the demand for dwellings must largely exceed the supply for many months to come, although at least 1500 to 2000 houses will be constructed this year.

THE most important act of the agricultural congress which met recently in the City of Mexico was its recommendation to the government of a scheme for special banks and loan companies to aid farmers, who are paying a tremendous rate of interest for necessary accommodations. President Diaz favors agricultural banks, and it is probable that foreign capitalists who may wish to co-operate with native capitalists would find them a profitable investment, receiving on perfect security at least 9 to 10 per cent.

COAL AND COKE.

Report of the Inspector of Coal Mines in Kentucky.

[The following is an abstract of an excellently prepared report on the Kentucky coal industry for 1892 made by the State mine inspector, C. J. Norwood.]

During the calendar year 1892 there were 128 commercial mines, bituminous and cannel, in operation, an increase of fourteen over 1891. Of the class known as shipping there were 111, fourteen more than in 1891. Complete returns relating to employees, etc., have not been received. On October 1 there were 9324 persons employed at all classes of mines that come under the inspector's supervision, 7517 of whom were engaged under ground.

The total output of bituminous coal for the calendar year was 2,972,640 short tons, 119 mines producing, of which 1,641,445 tons were produced by 111 mines during the last half of the year. This was an increase of 65,328 tons over the output of 1891, which is less than was expected and less than would have been the case had the production of the eastern districts not fallen off, principally on account of strikes, during the first half of the year. The increment was due entirely to increase of production in the western field, as shown by the following figures:

	Tons.
Increase in western district.....	128,359.56
Dec. in southeastern district.....	31,271.20
Dec. in northeastern district.....	31,759.66
Net increase.....	65,328.76

	Tons.
Lump.....	639,317.28
Nut.....	183,826.36
Mixed lump and nut.....	227,865.92
Run of mines.....	306,506.20
Pea.....	47,064.00
Slack.....	139,844.56
Miscellaneous.....	76,980.76
Total.....	1,641,445.08

This was a gain of 119,368.32 tons over the output for the same period in 1891, the respective districts making gains as follows:

Western district, 58 mines, gained.....	105,241.16
Southeastern district, 36 mines, gained.....	13,212.60
Northeastern district, 17 mines, gained.....	914.56

Total increase..... 119,368.32

The details of the bituminous output for the calendar year of 1892, according to districts, are as follows in short tons:

WESTERN DISTRICT (sixty-two mines).	
Lump.....	684,459.04
Nut.....	194,715.48
Mixed lump and nut.....	342,155.28
Run of mines.....	247,327.32
Pea.....	38,726.36
Slack.....	139,999.08
Miscellaneous.....	72,317.12
Total.....	1,719,809.68

SOUTHEASTERN DISTRICT (thirty-nine mines).	
Lump.....	287,947.12
Nut.....	93,635.52
Mixed lump and nut.....	127,853.48
Run of mines.....	194,633.36
Pea.....	28,282.60
Slack.....	51,420.52
Miscellaneous.....	53,225.80
Total.....	839,997.80

NORTHEASTERN DISTRICT (eighteen mines).	
Lump.....	204,851.66
Nut.....	41,145.48
Mixed lump and nut.....	16,999.56
Run of mines.....	95,625.32
Pea.....	11,695.08
Slack.....	33,501.16
Miscellaneous.....	8,799.32
Total.....	412,618.12

SUMMARY OF BITUMINOUS OUTPUT FOR CALENDAR YEAR.

Lump.....	1,177,257.76
Nut.....	329,456.48
Mixed nut and lump.....	497,065.32
Run of mines.....	537,586.00
Pea.....	76,814.04
Slack.....	227,920.76
Miscellaneous.....	134,342.24
Total.....	2,972,425.60

THE CANNEL MINES.

The output of the cannel mines for the calendar year 1892, nine mines producing, was as follows in short tons:

Bell county—one mine.....	270
Carter county—two mines.....	8,760
Greenup county—one mine (group).....	2,831.30
Hancock county—one mine.....	13,450
Johnson county—two mines.....	27,450.28
Lawrence county—one mine.....	231
Magoffin county—one mine.....	850
Total.....	53,842.86

This was an increase of 10,802 tons over the output of 1891.

PRODUCTION OF COKE.

The production of coke for the calendar year 1892 amounted to 36,860 short tons, a gain of 4167 tons over 1891. This was less than had been expected, the small increase being due to the fact that there was little done at the ovens in the eastern field, there having been an almost total cessation of production at the Bell county ovens during the last half of the year. Of the 18,295 tons produced during the last half of the year, the St. Bernard Coal Co., in the western field, made 17,433. The output of that company has grown steadily, while for various reasons not based on the quality of the coke, the great excellence of which is no longer in question, the production of the Bell county ovens (the only ones as yet in the eastern field) has materially declined. The St. Bernard Coal Co. increased its production by 5,033.65 tons for the first half of the year and by 4,255.50 tons for the last half over similar periods in 1891, a total increase for the year of 9289 tons, while the output of the Bell county ovens fell off 5122 tons as compared with 1891.

Following are the details of production, in short tons, for the calendar year:

Hopkins county, St. Bernard Coal Co.'s ovens, western field.....	31,455.95
Bell county, ovens of the Cumberland Valley Colliery Co. and its successor, the Breckenridge and Pineville syndicate, and of the Southern Land Improvement Co. and its lessee, the Central Appalachian Co., in the eastern field.....	5,404.25
Total.....	36,860.20

The indications now are that the eastern field will make a better showing in 1893, and that new territory will be developed in the typical "Elkhorn" region. Progress in coke-making in this State is now solely a question of transportation facilities; when this shall have been satisfactorily solved, and the prospects for its early solution are encouraging, it will be but a matter of a short while until Kentucky becomes one of the leading producers of furnace coke.

A New Process to Utilize Coal Refuse.

During the past few months experiments have been tried in this country and abroad with a compound which was said to intensify and perfect combustion, giving to the fuel on which it was used greater caloric efficiency than it could develop in its natural state. The composition of the powder used has been kept a secret, but it is said not to be expensive, and its beneficial effects have been vouched for by a number of able and, there is every reason to believe, disinterested men.

Recently a somewhat similar compound has been brought out in England and subjected to a series of very complete tests at the Atlas Iron & Steel Works of John Brown & Co., Limited, Sheffield, England. The substance in this case was used in making briquettes from anthracite coal dust secured from one of the Inman Line steamers. The results of this test are given in the following letter from John Brown & Co. to the directors of the company controlling the patents:

ATLAS STEEL AND IRON WORKS,
SHEFFIELD, December 15, 1892.

Referring to the trial in August last of your bricks made from the American coal which is supplied to us by the Inman Company, and which they use on the eastward voyages, we beg to hand you copy of the results obtained from two comparative tests, one made on May 12th with the coal in the natural condition, and the other made on August 22d with the coal made by you into bricks. In both cases our No. 5 Howden boiler was used, having "Serve" tubes and retarders, which explains the high evaporation per pound of fuel in each instance. It will be noticed with the same amount of blast we were able to burn the bricks at the rate of 33.8 pounds per square foot of grate per hour, whilst the density of the coal in its natural condition—being mostly dust coal with a small lump here and there—prevented a higher combustion than 23.85 pounds per square foot per hour. Taking into account that ten pounds more coal were burnt as bricks per square foot of grate per hour, the evaporation per pound of bricks is fully equal to the evaporation per pound of natural coal, whilst the bricks have enabled an evaporation of 10,133 pounds of water from a temperature of 69°, as against 7,362.5 pounds from a temperature of 59°. Reckoning twenty pounds of water per hour (as the English Admiralty does) as equal to one indicated horsepower, the total horse-power developed by the boiler was 506.6 with bricks, as against 368.1 with the natural coal, or reckoning fifteen pounds water per hour as equal to one indicated horsepower, as is customary in best triple expansion engines, the total horse-power developed with bricks was 673, as against 491 with natural coal. As we suppose that at the American mines (same as at our mines here) there is a quantity of small dust coal which at present is not sold to consumers of steam coal because it is considered too small, it seems to us that by your invention this waste coal could be profitably utilized, and replace at any rate the greater portion of the natural coal now delivered to the steamers, whilst the bricks have the advantage of the much higher rate of combustion, because the air can be readily forced or sucked through the fuel, and should make this far preferable to the natural fuel. Indeed, we are of the opinion that if very small American dust coal could not be had at a reduced price, as is the case here, it would pay the large steamship companies to have the ordinary natural coal ground small and made into bricks, notwithstanding the cost of the operation.

Yours truly,
JOHN BROWN & CO., Limited.

The concluding portion of this statement is certainly very strong testimony as to the relative efficiency of the fuel. Two experts who recently examined the process in regard to utilizing coke braize state that this material "was successfully made into compact, hard, sonorous and homogeneous bricks, and the result was obtained with a small amount of cementing material. The brick did not become disintegrated when burned, and taking into account the nature of the material sent for trial, the result was highly satisfactory."

The methods heretofore used in making artificial fuel, or, more properly speaking, to make a coherent fuel from fine coal, have generally been based on the use of pitch as the binding material. In practical working this has been found to have several disadvantages, probably the greatest being its high cost and the trouble in working with it. This new material apparently obviates these troubles and at the same time gives increased efficiency to the fuel. If the results already secured, according to these reports, are born out by further trials, the practical value of the invention can hardly be overestimated. It will afford a means of profitably utilizing waste coal or coke braize or of treating slack coal at small expense and with great gain. It may fairly be estimated that from 5 to 10 per cent. of the coal raised to the surface consists of dirty or slack coal having little commercial value, so that in handling this alone it would effect an enormous saving. Still further than this, in the sections of this country where there are extensive lignite deposits this process would permit their utilization, and to Texas this would be a benefit of incalculable value.

Its value would be twofold, in increasing the efficiency of the fuel, thus enabling a smaller amount to be used for a given effect, and in utilizing the waste now discarded, or, at best, of only slight value. Of this latter there could be no better illustration than the enormous banks of anthracite culm at the mouth of most of the mines in the Schuylkill valley in Pennsylvania. The attempts thus far made to work this culm into briquettes, using pitch as binding material, have not been nearly so successful as was anticipated. This new process would not only succeed in forming the shapes desired, but would give the fuel thus obtained higher caloric value than the lump coal.

So far as can be learned, the machine used for making briquettes with this substance is simple and direct in action. The coal dust is first mixed with the combining powder in the proportion of 96 per cent. of the former to 4 per cent. of the latter. This is then dropped into a mixing cylinder into which steam is admitted, and here the two are thoroughly incorporated. The mixture, now in a plastic condition, is

automatically fed to a revolving plate upon which are molds of the size and shape desired. As this plate moves it brings the mold under a powerful press, which compresses the mass with a force of two tons per square inch. Upon the pressure being released the plate moves around and a delivery ram forces out the compressed brick. The whole operation is automatic and entails little expense.

Cumberland Coal Shipments.

The shipments of coal from the Cumberland region for the week ended March 11 and for the year to that date have been as follows:

Companies.	Week. Tons.	Year. Tons.
Borden Mining Co.....	8,221.06	51,507.00
Consolidation Coal Co.....	14,273.00	151,589.10
Union Mine.....	3,960.12	34,767.19
George's Creek Coal & Iron Co.....	6,941.19	66,130.19
Swanton Mining Co.....	2,418.06	22,893.08
Potomac Coal Co.....	1,071.03	13,820.08
Franklin Cons. Coal Co.....	779.07	6,920.02
Piedmont Cumb. Coal Co.....	3,994.19	38,802.17
Barton & George's Creek Valley Coal Co.....	1,392.19	10,823.15
Big Vein Coal Co.....	341.10	2,805.15
Anthony Mining Co.....	6,397.17	55,705.03
W. Va. C. & P. (Elk Garden Mines).....	541.01	7,637.15
Atlantic & George's Crk Coal Co.....	1,707.00	14,692.00
Davis Coal & Coke Co.....	1,878.02	19,570.10
Thomas Mine.....	1,851.10	17,559.13
Davis and Elkin Mine.....	687.00	8,897.00
Cumb. Coal Co. (Douglas Mine).....	999.00	3,015.17
Elk Garden Big Vein Mining Co.....	135.05	10,031.12
Hampshire Mine.....	7,176.18	788.06
Big Vein Coal Co.....	5,227.13	50,295.07
American Coal Co.....	3,874.07	36,230.02
Maryland Coal Co.....		28,906.16
New Central Coal Co.....		
Total.....	73,870.14	
Previously.....	579,521.00	
Aggregate.....	653,391.14	653,391.14

COKE SHIPMENTS OVER WEST VIRGINIA CENTRAL & PITTSBURGH RAILWAY.

Companies.	Week. Tons.	Year. Tons.
Davis Coal & Coke Co....	839.00	11,960.00
Thomas Coke Ovens.....	321.09	2,395.02
Cumberland Coal Co.....	352.60	3,469.00
Total for week.....	1,512.69	
Previously for year.....	16,311.13	
Year to date.....	17,824.02	17,824.02
Same period last year.....		12,142.18

Coal and Coke Notes.

NEAR Tnnnelton, W. Va., on the B. & O. R. R., the Hillside Coal & Coke Co. is actively developing a coal mine.

THE Austin (W. Va.) Coke Works, C. Jessop, superintendent, expects to put in a rope-haulage plant this spring and increase the number of its ovens to 100.

The exports of coal from the port of Norfolk from January 1, 1893, to March 9, 1893, inclusive, as cleared by William Lamb & Co., agents at Lambert's Point, are as follows: Foreign exports 5805½ tons, coastwise exports 30,739½ tons. Total for week 36,545 tons, and the total amount to March 9, 1893, is 263,696 tons.

THE Louisiana Sugar Planters' Association held its regular annual meeting on March 9 in New Orleans. The annual report and statement of the treasurer were read, and following this came the election of officers for the ensuing year. The following gentlemen were nominated and elected: President, John Dymond; first vice-president, Henry McCall; second vice-president, H. C. Minor; third vice-president, Emile Rost; treasurer, W. B. Schmidt; secretary, H. H. Smith; executive committee, Dan Thompson, L. C. Keene, Andrew Price, W. B. Schmidt and Prof. William C. Stubbs. Several interesting papers were read and afterward discussed by the members.

COL. H. R. DUVAL, president of the Florida Central & Peninsular Railway, and other capitalists were at Red River Junction, Fla., on the 5th inst. They are buying up lands in this section, and will erect a large cement mill shortly.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department, on pages 136 and 137.]

Southern Cotton-Mill Operatives.

John Hill, of Columbus, Ga., knows the Southern cotton manufacturing industry, and knows how to write what he knows about it. He has written to the Boston *Journal of Commerce* about Southern mill help as follows:

"The operatives South are all, or nearly so, native-born Americans, foreign elements being rare, and very few operatives are migratory to any considerable extent, though some are found in each mill who have been employed in neighboring factories. There are many intelligent and skillful operatives in every mill of any size of considerable age, though they are by no means in a majority, or often any large fraction of the whole number.

"Our great drawback here is the number of changes in help. Very few operatives in mills are there to learn the business, and a large number consider their employment temporary, and are on the lookout for some better paid or less arduous employment in other occupations. This is particularly true of the rank and file of male operatives. There are comparatively no 'old maids' South. Marrying is very fashionable, and females twenty-five years and under look upon their employment simply as a means of living before marriage in a large number of instances, and always try to leave the mills when married. There is not so great interest by operatives in their efficiency and the character of the work done as is desirable, though this is not peculiar to the South.

"The greatest contrast between this class of labor South and elsewhere in the United States is the absence of education. There is no drawback South greater than the absence of school facilities very often; or, in the presence of such facilities, the want of appreciation. The free schools are what this class needs, and inducements to attend them. The morals are on an average with those of the same class elsewhere.

"Taken altogether, I do not think it will for many years be found practical to make fine goods South, and success can only be had at present on coarse and medium, when woven. Fine yarns up to 26s and 32s can be successfully spun, and the tendency is for all mules to spin finer averages. The truth is that there are so many coarse goods made South, the competition is one mill with another, and not with the East on this class, and finer goods must be made as a relief.

"I think Southern operatives industrious and tractable, but do not think that they will produce quite as much per hour as Eastern operatives, and eleven hours here are about equal, taken altogether, with ten hours East in results. Labor South is unquestionably cheaper than in the East. The cost of mills per spindle is about the same for equal sizes and numbers East and South. It costs more to freight machinery and less for building materials and labor. There is a decided advantage in freight on cotton, and this applies with much more force on coarse than fine numbers. Coarse numbers can be made cheaper South than East, but fine numbers can be made to better advantage East. This generation will not produce to profit very fine goods South. As before stated, the tendency South is to finer numbers, and manufacturers are giving a great deal of attention to diversified products. The usual trouble in such cases is that they try this without balancing the machinery of their mills to produce them, and in that case there is a disadvantage in the amount and cost of product. No mill East or South can have the best success unless the goods made are

such as the machinery is proportioned for, and the proper thing to do when character of products is to be changed is to first fit machinery to such change and adapt the mills for their manufacture."

A New Cotton Mill for Batesburg, S. C.

A new cotton mill will be built at Batesburg, S. C., in the near future. A charter has been issued to the Batesburg Cotton Manufacturing Co. with the following incorporators: W. H. Gunter, J. H. Huet, T. J. Kerningham, E. Jones, J. W. Comer, L. D. Cullum, E. C. Rigdell, F. S. Fox and a number of others. The capital stock is placed at \$50,000, with the privilege of increasing it to \$500,000, and the incorporators will at once commence making arrangements preparatory to building.

A New Machine to Save Waste Cotton.

A new and ingenious device to save the cotton fibre from the waste beneath the picker has been invented by the foreman of a mill in the West. The picker removes any seed, twigs, straws or similar material from the cotton, and as these are separated they always carry away a small amount of the fibre. This may not be much, but at the end of a year's time it sums up to quite an item, one well worth saving. Heretofore there has been no machine which would accomplish satisfactory results in handling such a large amount of material

upon the effect of electricity on cotton fibres. As an illustration of this, by placing the end of an iron rod in a bottle and then rubbing the part remaining outside with a silk cloth, then holding this over a handful of loose cotton, the fibres of the latter will be attracted toward the rod. In the machine this fact is taken advantage of, and as the fibres rise a current of air separates them from the trash and blows them into a suitable receptacle.

Meeting of Arkansas Cotton-Growers.

At the Cotton-Growers' Convention, held in Little Rock, Ark., March 10, delegates were present from fifty-two counties. A permanent organization was effected, and H. P. West, of Mississippi county, was elected president; H. T. Hawkins, of Columbia county, first vice-president; R. G. Atkinson, of Jefferson county, second vice-president; H. A. Bennett, of Pulaski county, third vice-president; H. N. Wood, of Lee county, secretary, and F. W. Broadnax, of Ouachita county, treasurer. Resolutions were passed advocating a decreased acreage of cotton for the present year, and exchanges of New York and New Orleans were memorialized to change their rules to conform with the rules of the grain and provision markets of the country. A committee was appointed to select delegates to attend the Interstate Cotton-Growers' Convention at New Orleans and

has already been subscribed, and the ultimate formation of the company is assured. T. S. Plowman and S. D. Kyser are the prime movers in the enterprise, and will furnish information to interested parties. They propose erecting a 3000-spindle plant at a cost of \$50,000. The shares are to be valued at \$100, and will be payable at \$2.50 a month.

THE Middlesex Knitting Co., of Martinsburg, W. Va., has commenced work on the woolen-mill addition to its plant which it recently decided to build.

It is rumored in San Antonio, Texas, that the Heilman wool-washing plant in that city will be converted into a cotton mill.

THE Luna Cotton Mills at Fort Mill, S. C., suspended a week on account of a breakage in machinery, but has now resumed and is running in full.

THE Florence Cotton Mills at Forest City, N. C., were badly damaged by a boiler explosion on the 13th inst. Besides the boiler, an engine and considerable other machinery was badly damaged. The shock of the explosion was felt at Rutherfordton, six miles distant. Repairs will be made at once.

THE Algernon Mills, of Augusta, Ga., have resumed operations under the management of Messrs. D. E. McGaw and James Brotherton, who have leased the property from Mr. Stewart Phinizy, who recently purchased it at public sale. The lessees are well capable of operating the plant, Mr. McGaw having been superintendent for the old company and Mr. Brotherton its secretary and treasurer. The factory's output for one year has been sold in advance to Mr. Henry Hyams, of New Orleans.

THE Richmond Factory, of Augusta, Ga., which was sold at receiver's sale several weeks ago, will be put in operation again by a new company now applying for charter. The new concern is to be known as the Phoenix Manufacturing Co., with a capital stock of \$35,000 and with privilege of increasing to \$100,000. Messrs. M. B. Hatcher, F. L. Fuller, Alfred Baker, J. R. Lamar and W. C. Jones are named as incorporators. As soon as the charter is granted a meeting will be held to perfect organization and arrange for commencing operations.

THE organization of the Freedom Manufacturing Co. has been perfected at Newport News, Frederick Douglas being chosen president. It is proposed to build a knitting mill near Newport News to work 300 hands, colored people only being given employment. J. C. Asbury, of Norfolk, is also interested. Charter has been obtained under West Virginia laws with an authorized capital of \$300,000.

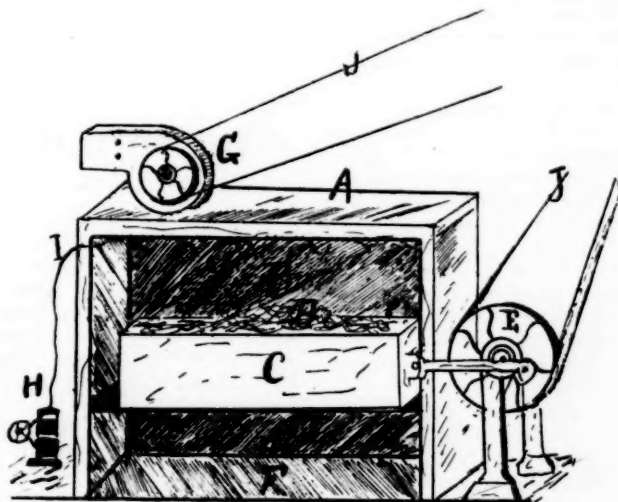
THE Enterprise Factory, of Augusta, Ga., James P. Verdery, president, has declared a semi-annual dividend of 3 per cent.

SUBSCRIPTIONS have been started at China Grove, N. C., for a \$40,000 stock company to erect a cotton factory. Over \$25,000 has been already subscribed and the other \$15,000 will doubtless be forthcoming in a few days.

THE Columbia Mills Co. has let contract for the erection of the buildings for the immense ducking mill which it proposes erecting on the Columbia Canal at Columbia, S. C.

THE Reed River Land Co.'s woolen-mill plant at Newberry Mills, Va., was destroyed by fire on the 12th inst. The plant turned out cassimeres and was under the management of C. W. Callaghan. The company will no doubt rebuild at once.

AN organization known as the Mobile Hosiery Co. has been formed at Mobile, Ala., and will establish a plant to employ about 100 hands and manufacture 200 dozen hose and half-hose daily.



to recover such a small proportion of it, but this new machine appears to do the work.

The accompanying illustration shows a working model of the machine. In this S represents a square box-shaped case built of wood. B is the interior of the box, one side being removed to permit a view of it. C is a cradle which rests upon bars fixed to the side of the chamber. D is the refuse material to be operated upon. E is a pulley, from which an arm runs to box C. When this pulley is turned by the belt J motion is given to the box, the object being to shake up the contents. F is the bottom floor of the box upon which the loose dirt and dust falls, as the bottom of the cradle C is fitted with a sieve. G is a ventilator fan. The fan is driven by the belt J. H is an electric motor, and I is a wire which connects with a series of wires inside the chamber B.

The operation of the machine is as follows: The cradle C is shaken in such way that the loose pieces of seed, etc., are kept in motion, thus exposing the cotton fibre adhering to same to the effects of an electrical current which is sent into the chamber through the wire I from the little motor H. The electricity causes the fibres of cotton to raise into the air and leave the pieces of seed behind. The moment the fibre gets free from the foreign matters the force of air from the fan G blows the cotton out of the chamber and allows it to fall to the floor.

The operation of the machine is based

thirty-one names were handed in. Prominent planters from all parts of the State were present, and it is generally understood that the cotton acreage will be materially reduced.

Cotton-Factory Project at Cragdale, Alabama.

A company is now being organized for the purpose of building a cotton factory at Cragdale, Ala., with every probability of success. It is proposed to organize with a capital of \$250,000, build and operate a mill of 10,000 spindles and 300 looms, develop a splendid water-power and build an electric railway from Cragdale to Talladega, a distance of four miles. The mills and railway are both to be operated by water-power and only new machinery, in every way first-class, will be used. Mr. W. Taylor is the prime mover in this enterprise.

Southern Textile Notes.

THE Long Island Cotton Mills Co., of Monro, N. C., intends to erect a new brick building and put in 1000 spindles, together with other new machinery. Jas. Brown is superintendent of this mill.

THROUGH the efforts of the Commercial Club a new knitting factory is to be established at Memphis, Tenn., to employ about forty hands.

STEADY progress is reported with the organization of the new cotton-mill company at Talladega, Ala. Over \$45,000

There has been a fair movement in lumber and timber during the week, and the market is reported in fair shape. The export business is better, and there are number of vessels loading for Northern ports. There is some demand from the West Indies and South America. The stock of lumber on hand is quite large, and receipts continue liberal, while prices are very steady under the fairly active demand. The clearances for the week were 75,000 feet of lumber per schooner Jennie A. Stubbs, for Kingston, Jamaica, and per New York steamers 110,000 feet; also 350,000 feet for New York per schooner A. H. Howe. In the list of prices merchantable timber is quoted \$14.00 to \$16.00 for city-sawed and \$12.00 to \$14.00 for railroad; square and round timber, \$9.00 to \$13.00 for railroad and \$8.00 to \$11.00 for raft. Dock timber is quoted \$4.50 to \$6.50.

and shipping \$8.50 to \$10.50. Shingles are steady at \$5.00 to \$7.00 per thousand. The ruling rates for yellow pine lumber from the South Atlantic ports to New York is \$5.00 per thousand.

EXPORTS OF LUMBER FROM CHARLESTON FROM SEPTEMBER 1, 1892, TO MARCH 10, 1893.

Exported to	1892-'93. Feet.	1891-'92. Feet.
New York.....	19,450,163	16,841,636
Boston.....	634,740	
Philadelphia.....	2,154,292	4,229,000
Baltimore.....	840,000	753,978
Other United States ports	1,009,000	1,338,000
Total coastwise.....	24,088,195	23,162,614
Great Britain.....		
Palermo.....		
France.....		
West Indies.....	1,542,596	1,574,300
South America.....		177,000
Nova Scotia.....		
Other foreign ports.....		578,174
Total foreign.....	1,542,596	2,329,474
Grand total.....	25,630,791	25,492,088

Savannah.

[From our own Correspondent.]

SAVANNAH, GA., March 14.

Trade generally is good in all branches of the lumber industry, and there is a fair volume of business in progress at this and adjacent milling sections of the State. There is a fair demand, both foreign and coastwise, running mostly into the larger sizes. Large mills are generally well supplied with these orders, but most of the mills are inquiring for small sizes and shorter lengths. The shipments during the week were not as large as usual and were as follows: New York 479,377 feet of lumber, Philadelphia 60,500 feet, Baltimore 363,262 feet, and to foreign ports 236,876 feet, making a total of 1,140,015 feet. The list of values continues very steady for all desirable grades of lumber, and easy sizes are quoted at \$11.50 to \$13.00, ordinary sizes \$12.00 to \$16.50, difficult sizes \$14.00 to \$25.00, flooring boards \$14.50 to \$22.00 and shipstuffs \$15.50 to \$25.00. In lumber freights rates begin to show a hardening tendency, and foreign business is more or less nominal. The rates from this and nearby Georgia ports are quoted nominally at \$4.25 to \$5.00 for a range including Baltimore and Portland, Me., to Buenos Ayres or Montevideo \$12.50, to Rio Janeiro \$15.00, and to Spanish and Mediterranean ports \$11.00 to \$11.50. Steamer rates to New York and Philadelphia \$7.00, to Boston \$8.00 and Baltimore \$5.50.

Pensacola.

[From our own Correspondent.]

PENSACOLA, FLA., March 13.

In the lumber and timber trade of Pensacola there is at present a very decided activity. The market during the week has not been as buoyant as usual, but the demand is good, and from the number of vessels in port there is good prospect of a large business during the months of April and May. At the close of business on Saturday hewn timber was quoted on a basis of nine cents, according to the average and quality. Sawn timber is doing better, and shipments continue large. Choctawhatchie timber was quoted on a basis of 11½ cents, and at Ferry Pass 11¼ cents, according to average and quality. The high water at Ferry Pass has brought a large quantity of timber to this market. The shipments during the week were mostly to foreign ports. There is a good demand from the West Indies and South and Central America. During the week nearly 1,000,000 feet of lumber were shipped to South America and about 4,000,000 feet to Europe. The market for lumber freights continues without change. Rates to the River Platte are \$12.00 to Buenos Ayres, and to Rio Janeiro \$14.00 to \$14.50. Large tonnage for United Kingdom or Continent is obtained at £4 5s. to £4 7s. 6d., and for smaller vessels £4 10s. to £4 12s. 6d.

Mobile.

[From our own Correspondent.]

MOBILE, ALA., March 14.

The lumber and timber trade of the port during the past week has been very fair as to the volume of business. The demand for timber for Europe is quite active, and during the week some large cargoes were shipped to the United Kingdom and Continent. The shipments of hewn timber reported for the week were 110,017 cubic feet, and since September 1 the exports aggregate 1,200,428 cubic feet. Of sawn timber there is also a fair inquiry, and shipments for the week aggregate 52,408 cubic feet, and since September 1, 1892, 1,190,211 cubic feet. From the West Indies, Central and South America, as well as from Europe, there is an active demand for lumber, 1,136,294 feet having been shipped during the week, and since September 1, 1892, shipments amount to 41,838,379 feet, against 30,783,242 feet for the corresponding period last year. There are many extensive improvements in progress to facilitate the shipping of lumber and timber, and at present along the wharves and docks there is presented some quite active scenes in the lumber industry of the port. Hunter, Benn & Co. have been making extensive improvements on the river front above the city, and have succeeded in getting a switch-track put in from the main lines of the Louisville & Nashville Railroad to their wharves, which will be a great convenience.

Beaumont.

BEAUMONT, TEXAS, March 13.

All our lumber people at this and adjacent points in the saw-mill section of Texas and Louisiana are greatly encouraged by the present outlook. There is a good general demand for all grades of lumber, and mills are fully engaged and working up to their full capacity to keep up with orders. Stocks in nearly all the yards are not excessive, and at the present rate of shipments it will take but a short time to clean up all the dry lumber. As a sample of how saw mills are running the cut of the Texas Tram & Lumber Co.'s mill in this city is a notable one. The aggregate cut of its mill for eight days ending the 9th inst. was 827,540 feet, showing an average of over 103,000 feet per day, which is an excellent sawing record. Of the general lumber market the Beaumont Journal, in its weekly review, says: "There has been a slight falling off in the number of orders received during the week, but the circumstance is scarcely noticeable, inasmuch as all manufacturers are pretty well loaded up and could not well clear off their dealers' orders inside of ten days. But while there has been a decrease in the number of orders, mills are nevertheless booking about as much stuff as they are shipping, so that they are still somewhat behind in shipments. The demand is for all grades and classes, which indicates that dealers are stocking up quite liberally or are at present in the enjoyment of a splendid trade." Present prices under the demand existing cannot hold, and an early advance is looked for. There is a light supply of shingles, and the demand is not urgent, while prices are unchanged. The mills at Orange closed a very active week, and the movement in lumber equalled any week during the current year. Prices are all very firm, and an advance is expected. There is considerable lumber being shipped for the Gulf trade, as well as material from the mills to La Porte, North Galveston, and railroad stuff to be used in the construction of the road that is being built out of La Porte and North Galveston going north. At Lake Charles, La., the Perkins & Miller Lumber Co., Limited, are doing a rushing business. As a progressive company they rank among the first, and their late achievement in cutting 158,000 feet of lumber in one day by a single saw of

Dixton's manufacture places them first in the list. The company now has a contract to furnish 500 cars of pavement blocks for Galveston, Texas, which will use up about 3,000,000 feet of timber. The mills at Westlake did a large business in the month of February, and the total shipments from all the mills at that point were 307 cars. A new depot is being built at Westlake to accommodate the increasing freight and passenger traffic. The new depot will be 120x24 feet.

COTTON MARKET.

NEW ORLEANS, LA., March 13.

Editor Manufacturers' Record:

During the past week conventions have been held at Little Rock, Ark., and Austin, Texas, for their respective States to consider the question of reduced cotton acreage, and in both cases resolutions were adopted recommending curtailment of the area to be planted this season, advising at the same time the diversifying of crops. The Texas convention strongly commended the development of manufacturing enterprises. We had been invited to send a representative to the Austin convention in consequence of the position we have taken so generally and consistently on the subject of curtailment of acreage, but as we were unable to comply with this complimentary request we sent to one of the delegates the following message, which was read and spread upon the minutes of the convention: "The subject to be discussed at your convention is the most practical of all questions that the planter or merchant can possibly consider. The world consumes about 7,500,000 bales of American cotton annually. This crop is 6,500,000 maximum, and apparently the consumer does not want it except at his own price, and yet the South, with an increased acreage, will give the cotton world next season 2,000,000 bales more perhaps than this season. Supply and demand regulate the price of any commodity in the long run, a fact as indisputable as nature's laws. If our people put upon the market another season a larger supply than the consumer needs for any possible requirements somebody will carry the surplus, and it will not be the spinner. We take the broad ground of the general good that will come to our people, morally as well as financially, by freeing themselves from a condition that in our opinion promises so little practical benefit so long as cotton is the one absorbing idea of those who till the soil. Our views expressed on cotton acreage reduction have not been those of a brokerage firm, but are decided impressions of Southern men in every way identified with Southern interests."

We have quoted this telegram because it says, in our humble opinion, all that the situation, from our standpoint, warrants. In other words, it is always the practical that sooner or later comes to the front, and in this connection we have, as a fact, the prospect of a crop decidedly under 6,500,000. At the same time the world's visible supply of American last Saturday was 3,668,000. What seems extraordinary is that with so large an amount of visible supply this crop anyhow is 2,500,000 bales less than the last one. Now the consumer says we cannot use cotton at present prices, or we don't want it at present prices, or, if we did want it, the operatives in the English mills won't work until their labor troubles are settled, and therefore, practically, the situation is the same as though the cotton is not needed at all, at least the amount of cotton that is represented between what the English mills are consuming now and what they consume under normal conditions. The South says you won't take our crop at nine cents, at least what is left of it, even though the amount is so much smaller than last year, but we are willing to give you

another year a big crop, and will wait and see if you won't pay us higher prices then. In the meantime we will pay \$25.00 per barrel for pork, with the hope that some extraordinary conditions of things will be realized later which will enable us to realize about ten cents another season for a crop of 8,500,000, while the consumer at the same time refuses to buy what we have grown (or what remains of last year's growth) at prices current here today, and on that basis throughout the South. Another big crop will make our lands so valueless, comparatively, as will force the planter to grow less cotton whether he wishes or not. ATWOOD VIOLETT & Co.

CLOSING PRICES OF COTTON FUTURES.

Months.	New Orleans. March 15.	New York. March 15.	Liverpool. March 15.
March.....	8.50	8.79	4 50-64
April.....	8.58	8.73	4 51-64
May.....	8.67	8.82	4 52-64
June.....	8.75	8.91	4 54-64 val.
July.....	8.82	8.97	4 55-64
August.....	8.82	9.07	4 56-64
September.....	8.68	8.92	4 53-64
October.....	8.60	8.88	4 51-64
November.....	.....	8.89	.....
December.....	.....	8.91	.....
January.....	.....	.....	.....
February.....	.....	.....	.....
Tone of market.	Quiet.	Barely steady.	Easy.

CLOSING PRICES OF SPOT COTTON.

Grade.	New Orleans. March 15.	New York. March 15.	Liverpool. March 15.
Middling.....	8 13-16	8 15-16	4 15-16
Low middling.....	8 9-16	8 1/2	4 13-16
Good ordinary.....	8 3-16	7 13-16	4 11-16
Tone of market.	Quiet.	Quiet and Easy.	Dull.

To Manufacture Paper from Cottonseed Hulls.

A meeting of local capitalists was held on Saturday last in New Orleans for the purpose of adopting the charter of the Cottonseed Hull Fibre Co., whose object is to establish and operate a mill for the manufacture of paper stock from cottonseed hulls. Mr. S. H. Kennedy presided, and Mr. J. S. Zachaire acted as secretary. The charter was read and adopted, and it was resolved to prepare lists for subscriptions to the capital stock and present them to the public for signatures. The capital stock is fixed at \$250,000, divided into 2500 shares of \$100 each, and the company will be authorized to begin business as soon as \$100,000 of the stock is subscribed. The mode of operation is to take cottonseed hulls, which have a value during the business season of cotton mills of \$2.00 per ton, and by the process of digesting, which lasts about six hours, by the use of soda ash are reduced to a pulp, producing after elimination from the hulls 27 to 30 per cent. of pure lint cotton. It is then washed and bleached and put through the same process as used in paper factories. The whole time consumed in the manufacture does not exceed thirty-six hours. The following named New Orleans men of prominence have consented to become incorporators of the company: J. C. Morris, R. M. Walmsley, Carl Kohn, George Q. Whitney, George R. Preston, John H. O'Conner, Henry Gardes, Numa Landry, Fred Peters, J. C. Deims, John M. Castel, L. C. Fallon, George W. Nott, A. H. Seward, Samuel Delgado, J. M. Parker, Jr., H. Schultz, J. U. Payne, John Barkley, John S. Rainey, Henry Beer, J. B. Sinnott, Frank T. Howard, Inles Meyer, Robert Maxwell, S. H. Kennedy, William Blake, Charles J. Lewis, Charles E. Levy, George E. Sears, S. Gumble, Charles Chaffee and James S. Zacharie.

THE Monticello Knitting Mill at Charlottesville, Va., was destroyed by fire last week, causing a loss of about \$14,000, half of which was on the machinery. The plant employed fifty persons in manufacturing hosiery, Mr. Jno. R. Emsley being the proprietor. He will doubtless rebuild.

to the new party have changed their minds, and say they will not order in advance of their wants.

We quote for cash f. o. b. cars Philadelphia:

Standard Ala. No. 1 X.....	\$15 00@	15 25
" " No. 2 X.....	14 00@	14 25
Embrée or equivalent, No. 1 X.....	15 25@	15 50
" " No. 2 X.....	14 25@	14 50
Strong lake ore coke iron, No. 1 X.....	16 00@	16 50
" " No. 2 X.....	15 00@	15 50
Lake Superior charcoal.....	15 50@	16 00
Standard Alabama C. C. C. W.....	20 00@	20 50

Rogers, Brown & Warner.

BOSTON, March 11.

Pig iron continues in fair demand in this section of the country. Southern furnaces report they are well sold up on No. 1 foundry and No. 1 soft. In fact a number of said furnaces have withdrawn from the market on the former grade, and we presume it will not be long before they give us the same instructions regarding the No. 1 soft. Southern gray forge, for which there is a limited demand in this section, is also becoming scarce.

The Niagara, which is a Lake Superior ore, strong iron, is becoming a very popular brand in this section. The same may be said of the Tonawanda (Northern) Scotch. Prices remain about the same as last quoted.

We quote for cash delivered Boston:

Alabama No. 1 foundry.....	\$15 50@	16 00
" " No. 2 " and No. 1 soft 14 50@	15 00	
" " No. 3 " " " " 14 00@	14 50	
" " C. C. car wheel.....	20 00@	20 50
Strong L. S. coke iron No. 1 foundry.....	17 25@	17 75
Lake Superior charcoal car wheel.....	19 50@	20 00
American Scotch (Northern) No. 1.....	17 00@	17 50

Rogers, Brown & Co.

LOUISVILLE, March 11.

Quite a large amount of iron has been sold, parties feeling disposed to purchase for long deliveries on basis of present prices. Iron has never been sold on lower basis, and there is certainly no risk on the part of consumers in closing for one's requirements. Work among car companies continues heavy; pipe shops also report more than usual work, and rolling mill companies are working on full time; they report prices for finished material, though, as low as they have ever made. Car-wheel irons remain unchanged and sales moderate.

The Louisville & Nashville Railroad purchased 1500 freight cars, the order being placed with the Mt. Vernon, Gadsden and Anniston car companies.

We quote for cash f. o. b. cars Louisville:

Southern coke No. 1 foundry.....	\$13 00@	13 25
" " No. 2 " " " " 12 00@	12 25	
" " No. 3 " " " " 11 00@	11 25	
" " gray forge.....	10 75@	11 00
" charcoal No. 1 foundry.....	15 00@	16 00
" car wheel.....	17 50@	17 75

Geo. H. Hull & Co.

Southern Iron Notes.

MR. C. H. GAGE has commenced the development of an iron mine near Llano, Texas.

HENRY KING, formerly general manager of the Roanoke Iron Co. at Roanoke, Va., has resigned from the active management and been succeeded by Rueben Patterson, of Pulaski, Va.

THE Mary Pratt furnace at Birmingham, Ala., was sold at public auction on the 10th inst. for \$100,000 to W. T. Underwood, of Birmingham. The terms make the purchaser assume a bonded indebtedness of \$57,000. Mr. Underwood intends putting the plant in blast in the near future.

THE Waynesboro Stove Co.'s factory at Waynesboro, Va., which was closed last October after having been in operation for about a year, has been started again, the first casting being done on Tuesday. W. J. Loth, the manager and principal stockholder of the company, has leased the plant for a term of years and intends to put it soon into full operation. The factory, it is said, possesses the greatest variety of and the best assortment of stove patterns south of Philadelphia. It was closed last fall not so much for lack of capital or because of unprofitable operation, but to

await a change that has since been effected in the control of the business.

The American Railway Water Co.

The American Railway Water Co., organized under the laws of Arkansas, is now preparing to manufacture and lease its automatic railway water pumps, and the company has established offices at the following cities: Chicago, St. Louis and Memphis, Tenn. The home office is located at Little Rock, Ark. The inventor, Mr. H. D. Layman, who is also president and general manager, will open the Eastern office at New York in a few weeks. The company has a strong board of directors in J. P. Webb, L. R. Stark, W. F. Hill, J. C. Ramsey, Fred L. Gorsill and J. Kellogg, all of Little Rock, Ark.

The company is operating under patents covering mechanical appliances for automatically supplying railroad locomotives with economical water service in connection with existing storage tanks, keeping a supply of water at less cost than by the old system, and relieving the railroad company of all trouble on account of same. The automatic pump is operated by cable transmission from the passing train, dispensing with the stationary engine and other devices for filling tanks. It saves the expense of fuel, repairs on machinery and salary of an employee to run the same. By this process 3500 gallons of water goes into the storage tank in less than one minute, freight trains operating and filling the tank.

The plan of the American Railway Water Co. is to equip railroads with the pumps, placing them on royalty as the air-brake, etc., and maintain them at the company's expense. Thus far the pumps have been endorsed by the master mechanics of the following railroads: Illinois Central, Kansas City, Memphis & Birmingham and Memphis & Charleston. In a few weeks additional pumps will go into operation on the Western railroads.

THE Standard Cotton Mills, of Rock Hill, S. C., held a meeting of stockholders last week, and the following board of directors was re-elected: J. R. London, W. L. Roddey, W. J. Rawlinson, A. Friedham, R. T. Fewell, W. J. Roddey, A. E. Smith, J. B. Johnson and T. A. Crawford. Mr. London was re-elected president, and Mr. P. C. Poag, secretary. An addition of 150 looms was decided on, and the order will be given at once. The plant will then have in all 570 looms. Last year the mill turned out 4,432,370 yards of cloth, and this new machinery will increase its yearly capacity to 6,000,000 yards. There are 200 operatives now employed in the plant.

THE charter of the New Braunfels cottonseed-oil mill was received last week. The capital stock is \$100,000, divided into 1000 shares of \$100 each, and the capacity of the mills is forty tons per day. The machinery, all of the latest and most approved make, has been ordered, and building will commence at once. The directors for the ensuing year are Joseph, Peter and John Faust, H. Dillinger, E. Blumberg, T. Reinarz, George Knooke, John Marbach and F. Hein. The charter runs fifty years.

It is said that Messrs. Williams & Swann, of Fernandina, Fla., are the possessors of lands in Levy county on which ochre has been discovered. This land was valued at about 75 cents to \$1.00 per acre, and it is now optioned at \$6.00 per acre, and has been reoptioned at \$4.00 advance in price. The lands are in the neighborhood of Ellzey and Bronson, Fla. Quite an excitement prevails on account of the discovery.

THE contract for a concrete foundation for the new oil mill at Bryan, Texas, has been let to J. M. Brown. The buildings, which will be erected by J. B. Conway, are to be of brick.

TRADE NOTES.

THE fire district of Warwick, R. I., is to add to its fire appliance two improved steel frame hook and ladder trucks to be built at the shops of the Gleason & Bailey Manufacturing Co., Seneca Falls, N. Y.

THE Harrisburg Boiler & Manufacturing Co., of Harrisburg, Pa., which recently reorganized, is completing some extensive additions to its plant and preparing to take care of its rapidly growing Southern trade. Besides the Star water-tube and gas-burner boilers, it will soon manufacture other specialties in this line.

THE city officials of White Plains, N. Y., after their recent disastrous experience with and consequent rejection of some very unreliable fire apparatus, have invited the Gleason & Bailey Manufacturing Co., of Seneca Falls, N. Y., to construct for the city two elaborate service-hose carriages which are to cost, for the pair, not less than \$2000.

THE Kanneberg Roofing Co., of Canton, Ohio, has issued a neat pamphlet on metal roofing and siding, in which are shown illustrations of a variety of forms of metal for these purposes. It will be remembered that this company recently had decided in its favor several interference cases on its patents for improvements on sheet-metal roofing.

THE Best Engine & Machine Works, of Lancaster, Pa., is offering for sale a list of second-hand engines and boilers, which is given in detail on another page in this issue. This company manufactures an extensive line of portable and stationary engines and boilers, saw mills, oil and water tanks, the Lancaster radiator and other specialties, and its work is well known throughout the country.

In consequence of increased and improved facilities in the manufacture of standard presses, the E. W. Bliss Co., of Brooklyn, N. Y., states that it is now in position to offer adjustable power presses Nos. 10, 12, 12½, 18, 19 and 20 at reduced prices, and proposes to give its customers and the trade the benefit of it. The company keeps these presses in stock, and shipments can be made at once. It reports a large business for the year so far, and the brightest prospects for the future.

THE people of the South should patronize and encourage as far as possible home industry, and thereby keep money at home. Hundreds of thousands of dollars are being sent annually to the North for steel and iron roofing. This is no longer necessary, for there is located in Chattanooga, Tenn., as well-equipped a factory as there is in the country—called the Chattanooga Steel Roofing Co. Its goods are excellent, and it deserves the patronage and encouragement of every citizen of the South.

QUEEN & Co., Incorporated, Philadelphia, are introducing a steam-engine indicator of especial merit, "the Bachelor." This indicator is a new departure from all other forms, the important feature being the flat adjustable spring by which the change can be made from one scale to another by a simple adjustment of the fulcrum, thus avoiding the extra expense and necessity of carrying a series of spiral springs. This house has also this year put on the market a line of steam and pressure gages of their own make, for which they claim great accuracy.

THE Joseph Dixon Crucible Co. has at last been awarded space in the Columbian Exposition—a space 25x28 feet in the mines building for a general exhibit of graphite productions such as crucibles, lubricating graphite, graphite axle grease, pumbago facings, graphite machine and railway grease, Dixon's stove polish, silica-graphite paint, core wash, electrotyping graphite, graphite cylinder oil, graphite specialties for electrical and other work, etc. A space of 13x10 feet only was obtainable in the manufacturers' building for an exhibit of Dixon's "American Graphite" pencils and pencil sundries.

THE Berlin Iron Bridge Co., of East Berlin, Conn., has secured the contract for the new buildings required by William Cramp & Sons Ship & Engine Building Co., Philadelphia, Pa. It has recently completed a boiler shop for the Cramps, and now has a contract for all the other buildings required to enlarge the plant. The new buildings will consist of a ship shed 60x100 feet, a black-board 75x200 feet and a bending shed 86x150 feet constructed throughout of iron. The company has just completed a power station thirty-eight feet wide by 112 feet long for the Roaring Fork Electric Light & Power Co. at Aspen, Col.

AMONG the patents issued by the patent office on February 28, 1893, was one granted to Mr. Alvin C. Kanneberg, of the Kanneberg Roofing Co., for an improvement in sheet-metal roofing. The issuance of this patent has been strenuously contested in the patent office, there having been two interferences and five hearings, all of which were decided in favor of Mr. Kanneberg. The Kanneberg Roofing Co., Canton, Ohio, has recently enlarged its plant, and now occupies the entire block

between Oak street and the electric-light station on East Seventh street, and has now a factory fully equipped with modern machinery for the manufacture of all kinds of steel and iron roofing, siding, ceiling, metallic shingles, eave trough, conductor pipe, etc.

USERS of woodworking machinery will always have the same opportunity as before enjoyed, in that they can select a machine of J. A. Fay & Co. make or one of the Egan Co. construction. Entire outfits, too, can be had as heretofore. The new J. A. Fay & Egan Co., of Cincinnati, Ohio, U. S. A., propose designating each plant formerly occupied by the old concerns as the Fay department and the Egan department, and both will be run by the same foremen and workmen as in the past. Each department will continue to construct machinery from the same patterns and precisely of the same type, but with improvements which will be added from time to time, thus keeping up the same standard of excellence which characterized the productions of the older establishments.

HAVING built for the City of Jackson, Miss., an improved hose wagon to the entire satisfaction of the fire department, the Gleason, Bailey Manufacturing Co., of Seneca Falls, N. Y., now has an order from the same source for a horse hose tender. The authorities of the City of Detroit, Mich., have given an order to this company for two large improved hose wagons similar to the wagons built by this concern for the City of New York. The village of East Aurora, N. Y., has ordered a hose carriage from the same concern, and the fire commissioners of Pelhamville, N. Y., have ordered an outfit consisting of hook and ladder truck, parade carriage and service hose jumper. The satisfactory results attending the use of fire apparatus made by the Gleason & Bailey Co. is indicated by the many favorable comments by the press and fire officials.

THE Laidlaw & Dunn Co., of Cincinnati, and the Gordon Pump Co., of Hamilton, have agreed on terms of consolidation. The business of the two companies hereafter will be carried on by one company, to be called the Laidlaw-Dunn-Gordon Co. Its capital stock will be \$700,000, and the consolidated company will at a very early date begin the erection in Cincinnati or its immediate vicinity of the largest and best-equipped pump and hydraulic works in the West, if not in the United States. As soon as this factory is completed both works will be moved into it. The directors of the new company are Robert Laidlaw, Walter Laidlaw, John W. Dunn, Thomas McDougall, Alexander Gordon, Robert McKinney, Thomas J. Gaff. The officers of the company are Robert Laidlaw, president; Walter Laidlaw, vice-president and general manager, and John W. Dunn, secretary and treasurer.

EVERYONE recognizing the value of trade-marks will also appreciate the necessity of preventing them from being counterfeited. It appears that the growing magnitude of the trade between the United States and South American countries has prompted manufacturers of other countries to apply the trade-marks used on United States products which have become popular by reason of merit to similar articles made by themselves, and thus palm off inferior goods on the consumer to the injury of the legitimate owner of the trade-mark. American goods are thus defamed and a loss in exports the result. This, however, can be easily prevented by having the trade-marks registered in those countries under treaty provisions, which afford ample protection, and in this connection it may be of interest to know that Judson Shute, of 82 Devonshire street, Boston, Mass., is thoroughly acquainted with such matters and is in a position to obtain such protection for manufacturers.

DURING the month of February the Gordon Hollow-Blast Grate Co., of Greenville, Mich., made sales to the following: Grelick Bros., Traverse City, Mich.; Gaston & Hood, Harriette, Mich.; Buckley & Peterson, Petoskey, Mich.; George B. Ehrenkrook, Iron River, Mich.; J. S. Stearns, Bennett, Lake county, Mich.; Britton & Barber Stave Co., Saginaw, E. S. Mich.; F. W. Read & Co., Eagle Mills, Mich.; Minor Lumber Co., Alpena, Mich.; S. Teesdale & Son, Constantine, Mich.; Pelton & Read, Cheboygan, Mich.; Wellman Manufacturing Co., Ovid, Mich.; P. T. Brown, Sharpville, Ind.; Thomas Bayne, Ellettsville, Ind.; G. W. Scantland & Co., Lynn, Ind.; Auburn Church Furniture Co., Auburn, Ind.; J. C. Henry, South Whitley, Ind.; Shelly Bros., Holgate, Ohio; D. G. Sharp, The Bend, Ohio; Marshall & Greener, Defiance, Ohio; Hector Stave Co., Hector, Ohio; D. F. Holston & Son, Defiance, Ohio; C. Sirom, Spokane, Ohio; D. Shepard & Son, Convoys, Ohio; John R. Davis Lumber Co., Phillips, Wis.; W. S. Monroe, Cadott, Wis.; H. Waterbury & Sons Co., Oriskany, N. Y.; Edwards Lumber Co., Lambethville, Ark.; J. J. Hewitt, Albion, Pa.; O. P. Bell, Memphis, Tenn.; P. J. Cirkel, Memphis, Tenn.; Germania Lead Works, Salt Lake City, Utah; Canton Saw Mill Co., Canton, Mo.; Standard Kiln-Dried Lumber Co., Norfolk, Va.; Palmetto Cypress Co., Georgetown, S. C.; Three States Lumber Co., Cairo, Ill.; Nelson, Tenney & Co., Minneapolis, Minn.

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

* Means machinery is wanted, particulars of which will be found in "Machinery Wanted" columns.

† In correspondence relating to matters reported in this paper, it will be a favor if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ALABAMA.

Anniston—Cotton Gin.—T. A. Pelham will erect a new cotton gin.*

Birmingham—Gas Works.—E. F. Euslen and associates expect to construct gas works. Will begin some time this summer.

Cragdale (P. O. Talladega)—Cotton Mill.—A \$250,000 company is to be organized to erect a cotton mill. W. Taylor can inform.

Gurley—Bucket Factory.—The report in our last issue that the Alabama Lumber & Manufacturing Co.'s bucket factory was burned is incorrect, only a dryhouse having been destroyed. Work on a 60-foot addition to the plant has commenced.

Lacon—Grist Mill and Gin.—Stewart & Frickie, of Hartselle, will build a grist mill and cotton gin at Lacon.

Lexington—Tobacco Factory.—Frank Glover and John Porter are erecting a tobacco factory.

Mobile—Knitting Mill.—A new knitting mill will be established.

Mobile—Sewerage System.—A stock company may be formed to construct a sewerage system. P. Pollock can give information.

Mobile—Hosiery Mill.—The Mobile Hosiery Co. will start a mill.

Montgomery—Iron Bridge.—The Montgomery Brewing Co. will construct an iron bridge over the Alabama river at or near Montgomery. Will be ready for bids by May 1. Address C. E. Hails, secretary.

Roanoke—Cottonseed-oil Mill.—A \$12,000 oil mill is reported as to be erected in Roanoke.

Talladega—Cotton Mill.—A stock company to build a cotton mill is being formed. Plowman & Keyser can give information.

ARKANSAS.

Altheimer—Shingle Mill.—S. Anderson & Co., of Little Rock, will erect a shingle mill at Gray Station, on the "Cotton Belt."

Dermott—Shingle Mill.—T. O. Wilson & Co., of Little Rock, will build a shingle mill at Dermott.

Lansing—Shingle Mill.—George H. Van Etten & Co., of Little Rock, will erect a shingle mill near Lansing.

Osceola—Telephone Company.—N. L. Avery, B. W. Hale, W. H. Pullen, H. L. Nassett, J. E. Pruitt and C. F. Scott have incorporated the Northeastern Arkansas Telephone Co.

FLORIDA.

Chipley—Saw Mill.—Scott & Gilman will erect a saw-milling plant. Machinery has been purchased.

Ocala—Cigar Factory.—A Mr. Moreles will establish a cigar factory.

GEORGIA.

Americus—Canning Factory.—D. A. Rogers will establish a canning factory.*

Augusta—Cotton Mill.—Charter has been granted to the Phoenix Factory for the manufacture of cotton goods, etc.; capital stock \$35,000. This company will operate the old Richmond Factory.

Fort Valley—Fruit Company.—J. B. James, of Fort Valley; W. L. Glessner, of Macon, and others have applied for charter for the Tivola Fruit Land Co., with a capital stock of \$50,000. They propose cultivating fruit trees.

KENTUCKY.

Carrollton—Pants Factory.—D. M. Bridges, M. L. Downs, W. R. Fisher and E. A. Gullion will

organize a \$15,000 stock company for the manufacture of pants.

Covington—Chemical Works.—Peter Nodler, R. P. Nodler, Samuel Williamson and Wm. H. Glore have incorporated the Ohio & Kentucky Chemical Manufacturing Co. to manufacture chemicals, etc. Their capital stock is \$50,000.

Covington—Reese W. Dugan, Edmund L. Nash and Samuel D. Gibbs have incorporated the Guarantee Bond & Investment Co. with a capital stock of \$100,000.

Louisville—Plaster Works.—B. J. Campbell, J. B. Campbell and B. J. Campbell, Jr., have incorporated the Kentucky Wall Plaster Co. to manufacture wall plaster. Their capital stock is \$25,000.

Louisville—Mercantile Company.—John H. Bates, James W. Bates, Henry H. Symmes and Wm. H. Bates have incorporated the Bates-Symmes Co. to deal in roofing, etc. The capital stock is \$10,000.

Middlesborough—Furniture Factory.—The Middlesborough Furniture Co. will rebuild its furniture factory reported in this issue as burned.

LOUISIANA.

Abbeville—Sugar Mill.—T. S. Winston will erect a new steam mill on Rose Bower plantation in Vermilion parish.

Houma—Sugar Mill.—Buford & Bernard, on the Chacohoula, in Terrebonne parish, will erect an auxiliary mill.

Houma—Sugar Mill.—McCormick & Cocke, at Poverty Flat, will erect a new mill and improve their factory.

Monroe—Steam Laundry.—The Parlor City Laundry Co., recently reported as organized, has obtained its charter. The capital stock is \$25,000.

New Orleans—Improvement Company.—The New Orleans Improvement Co., Limited, has been incorporated with a capital stock of \$500,000. Jos. H. De Grange is president, and Thomas H. Watson, vice-president. Geo. K. Pratt, Charles Carroll, Wm. P. Nicholls, Albert P. Noll and others are the directors.

New Orleans.—The Stafford Mineral Springs & Hotel Co., Limited, has been incorporated with a capital stock of \$350,000. Henry Gardes is president, and Henry Mordecai, secretary. The above, with John Kerr, L. A. Mordecai and W. W. Girault, are the directors.

New Orleans—Leon Haubman is president; William J. Gibbens, secretary, and A. F. Slangerup, treasurer, of the Golding Evaporator Co., reported last week as incorporated.

New Orleans.—The American Fire Insurance Co. has been chartered with a capital stock of \$100,000.

Natchitoches—Iron Bridge.—Contract for the construction of an iron drawbridge across the Cane river has been let to the Youngstown Bridge Co., of Youngstown, Ohio, at \$15,500.

New Orleans—Paper-stock Factory.—S. H. Kennedy and J. S. Zacharie are organizing the Cottonseed-Hull Fibre Co. with a capital stock of \$250,000 to establish a mill for the manufacture of paper stock from cottonseed hulls.

New Orleans.—The Real Estate Investment Co. has been incorporated by Frank L. Gordon, Oliver J. Paul, Jos. W. Carroll and Charles Carroll; capital stock \$50,000.

Plaquemine—Sugar Mill.—Andrew H. Gay, of Union plantation, in Iberville parish, has let contract to the Fulton Iron Works, of St. Louis, Mo., for a complete 6-roller cane mill.

MARYLAND.

Baltimore—Distillery.—The Monumental Distillery Co. has been incorporated with a capital stock of \$100,000 for the purpose of manufacturing alcoholic spirits.

Baltimore—Real Estate.—Hugh B. Hanna, George Mann, Wm. J. Gray, Peter Gray, Thos. E. Bond, Peter Hamilton and G. Morris Bond have incorporated the Gray Improvement Co. with a capital stock of \$98,000. Their purpose is to deal in real estate.

Baltimore—Car-brake Works.—The Boyden Air-Brake Co. has increased its capital stock by \$1,000,000. Half of this is common stock and the other half preferred stock, guaranteeing a 6 per cent. interest, payable semi-annually.

Baltimore.—Louis F. Detrick, Wm. H. Detrick, Wm. G. Miller and N. Rufus Gill, of Baltimore, and Robt. T. Bicknell, of Boston, Mass., have incorporated the Detrick Fertilizer & Chemical Co. with a capital stock of \$100,000.

Baltimore—Tin and Japanned Ware Factory.—Mathai, Ingram & Co. will rebuild their tin and japanned-ware factory annex reported in this issue as burned.

Easton—Ice Factory.—Robt. B. Dixon, Jos. H. White, Wm. E. Shannahan and Wm. N. Adkins have organized the Easton Ice Co. for the purpose of manufacturing ice with a capital stock of \$12,000.

Gaithersburg—Barrel Factory.—The Milling & Manufacturing Co. is building a barrel factory.

Laytonsville—Grist Mill.—Mr. Benson will put additional machinery in his grist mill.

Parsonsburg—Basket and Crate Factory.—E. W. Parsons, J. E. Jackson, E. H. Parsons, Jno. W. Wimbrow, Isaac N. Hearn and Eugene Oliphant have formed a stock company to erect a crate and basket factory.

Sykesville—Flour Mill.—Business men have formed a company to put in a \$30,000 flour mill.

Washington, D. C.—Sewer-cleaners.—The Washington Sewer-Cleaning Co. has been formed for the purpose of controlling the sewer-cleaning device patented by Daniel Knowles, of Norfolk, Va. The capital stock is \$100,000.

MISSISSIPPI.

Greenville—Mercantile Company.—The Delta Grocery Co. has been incorporated with a capital stock of \$50,000 by W. A. Everman, J. D. Smith, C. G. Beardslee, Dan Head and others.

Greenville—Water Works.—The city will construct a system of water works.* (See ad.)

Greenville.—J. S. Walker, H. T. Ireys, H. E. Wetherbee, N. Goldstein, J. H. Leavenworth, J. D. Smith, George F. Archer and others have incorporated the Greenville Wharf & Storage Co. with a capital stock of \$10,000.

Scranton—Lumber Mills.—John Cameron, C. T. Irving, C. Halley, Edward Mitchell and Jonas Green have organized the New Venice Lumber, Shingle & General Manufacturing Co. at New Venice, Jackson county, Miss. The capital stock is \$20,000.

Vicksburg—Stone Works.—A. A. Meneghe, J. W. Beck, Julia Blum, M. O. Gorman and E. K. Beer have incorporated the Hill City Monumental & Stone Co. to buy and sell stone, establish yards, etc. The capital stock is \$200,000.

NORTH CAROLINA.

Charlotte.—Henry E. Knox is forming a hydraulic engineering company.

China Grove—Cotton Mill.—A \$25,000 stock company has been formed to erect a cotton mill. Patterson & Calliher can give information.

Durham—Shoe Factory.—C. H. Doughty, of Greensboro, will establish a shoe factory in Durham.

Hulon—Grist Mill.—Spaugh & Fishel have put in a grist mill.

Monbo—Cotton Mill.—The Long Island Cotton Mills Co. will greatly improve its plant.

Raleigh—Ice Factory.—The Hygienic Plate Ice Co. will improve its factory. Contract for improvements is let.

Tarboro—Machine Works.—King & Son, of Goldsboro, have leased and will operate the Edgcombe Agricultural Works.

SOUTH CAROLINA.

Batesburg—Cotton Mill.—Charter has been issued to the Batesburg Cotton Manufacturing Co., with a capital stock of \$50,000. The incorporators are W. H. Gunter, J. W. Cooner, L. D. Cullen, T. S. Fox and others. Their intention is to erect a new mill.

Brigham—Saw Mill.—The Maulboro Lumber Co. will erect a saw mill.*

Charleston.—The Charleston Produce Co. will be chartered. R. H. Simons is president, and Wm. Simons, manager.

Fort Mill—Sash and Door Factory.—The Spratt Machine Co., reported last week as incorporated, has elected J. M. Spratt president, secretary and treasurer, and S. E. White, vice-president.

Rock Hill—Cotton Mill.—The Standard Cotton Mills will put in 150 additional looms.

Spartanburg—Broom Factory.—The Carolina Broom Works has been incorporated with S. B. Jones, Jr., as president and treasurer, and Wm. Jones, vice-president and secretary; capital \$2000.

Sumter—Cottonseed-oil Mill.—A company has been formed to erect a cottonseed-oil mill. Henry R. Bloom can give information.*

TENNESSEE.

Harriman—Coal Mine.—The Co-operative Coal & Mining Co. has opened a mine at Little Emory Gap.

Johnson City—Implement Works.—The Valley Machine Co. has been organized with a capital stock of \$50,000 to build implement works. C. N. Brown is president; J. M. Carr, vice-president; J. P. Summers, treasurer, and G. F. Lieb, secretary.

Murfreesboro—Sewers.—The city intends to issue \$30,000 in bonds to construct sewers. The mayor can inform.

Paris—Electric-light Plant and Water Works.—The city will vote upon the question of issuing \$35,000 in bonds for water works and \$10,000 for an electric-light plant. Y. Q. Caldwell, mayor, can give information.

Rockwood—Iron Furnace.—The Roane Iron Co. will rebuild its Rockwood furnace.

Shelbyville—Pencil Factory.—The American Pencil Co., of New Jersey, will erect a factory in Shelbyville.

South Pittsburg—Increase Capital.—The South Pittsburg Electric Light & Power Co. has increased its capital stock 50 per cent.

TEXAS.

Alleyton—Grist Mill.—Powell & Shaw, of Columbus, are putting in a steam press and grist mill at Alleyton at a cost of \$5000.

Bastrop—Cottonseed-oil Mill.—The Bastrop Cotton-Oil Co. has been organized with a capital stock of \$45,000 to erect a 30-ton cottonseed-oil mill. W. C. Powell, S. F. Green, J. M. Meyer, W. A. McCord, Louis Eilers, Jr., and others form the company.

Beaumont—Iron Bridge.—Contract for building a 100-foot iron bridge over Taylor bayou has been let to the Missouri Valley Bridge and Iron Works, of Leavenworth, Kans., at \$6200.

Benarnold—Cotton Gin.—C. C. Carlisle and Isaac Looney are building a 40-bale cotton gin.

Bowie—Cottonseed-oil Mill.—Daniel Wagoner, S. A. Lillard, Thos. Wagoner, Julia F. Halsell and H. H. Halsell, of Decatur, have incorporated the Bowie Cottonseed Oil Co. to operate a cottonseed-oil mill. Their capital stock is \$50,000.

Brownsville—Irrigating Plants.—W. H. Chatfield, of St. Augustine, Fla.; Thomas Carson, H. M. Field, G. M. Raphael, J. R. Monroe and others have incorporated the Chatfield Irrigation Co. for the purpose of constructing irrigating canals in Cameron and other counties. The capital stock is \$100,000.

Brownwood—Cotton Compress.—Brownwood parties have closed a trade with W. W. Howland and others, of Chattanooga, Tenn., for the erection of a \$30,000 cotton compress in Brownwood.

Cameron—Bottling Works.—C. D. Webster has established bottling works.

Columbus—Electric-light Plant.—Towell & Shaw have been granted franchise for the erection of an electric-light plant, and will at once proceed to build same.

Dallas.—J. C. Gebhart, S. H. Millican and P. A. Tucker have incorporated the Scientific Medical Co. with a capital stock of \$10,000.

Denison—Increase of Capital.—The Waples-Platter Grocery Co. has increased its capital stock from \$150,000 to \$250,000.

Denison—Cotton Compress.—The Denison compress, reported in this issue as burned, will be rebuilt.

Ennis—Cottonseed-oil Mill.—Scales & Culbertson, of Corsicana, will erect a 75-ton cottonseed-oil mill in Ennis.

Fort Worth—Distillery.—Martin Casey, S. M. Heffheimer and B. B. Thompson have incorporated the Columbia Distillery Co. with a capital stock of \$100,000.

Galveston—Increase Capital.—The Galveston Sewer Co. has increased its capital stock from \$20,000 to \$40,000.

Galveston—Soap Factory.—A \$100,000 company will be organized to erect a first-class soap factory.

Gilmer—Saw Mills.—The Star Lumber Co. is putting in new machinery.

Grand View—Cottonseed-oil Mill.—N. F. Watts, J. E. Walker, W. G. Davis, G. A. Harrell, W. L. Knight, S. S. Ramsey and F. E. Davis have incorporated the Grand View Oil Mill Co. to erect a cottonseed-oil mill. Their capital stock is \$40,000.

Hillsboro.—H. E. Porter and others have incorporated the Hill County Fair Association with a capital of \$10,000.

Houston.—W. H. Coyle, H. M. Curtis, J. L. Mitchell, S. F. Allee and J. F. Myer have incorporated the Morgan Land & Loan Co. with a capital of \$50,000.

Houston—Wire Works.—A. A. Berger has started woven wire works.

Houston—Ice and Refrigerating Plant.—H. Henke, C. G. Pilot and W. J. Lemp have incorporated the H. Henke Artesian Ice & Refrigerating Co. with a capital stock of \$80,000.

Huntsville—Ice Factory.—The Barrett Ice Co., reported last week as erecting plant, has obtained charter. C. G. Barrett, C. H. Robinson, J. G. Ashford and W. S. Gibbs are the directors; capital stock \$6000.

Karnes City—Water Works.—C. H. Mayfield, Otto Buchtel, J. H. Barkley and C. L. Burghard have incorporated the Karnes City Water Works Co. with a capital stock of \$12,000.

Lamkin—Mercantile.—H. A. Carmichael, J. T. Eargle, E. Cantrell, Charles Knutson and C. W. Ewell have incorporated the Lamkin Mercantile Co. with a capital stock of \$3000.

Llano-Iron Mines.—The Bessemer-Llano Development Co. has been incorporated to mine iron and other ores with a capital stock of \$3,000,000, \$25,000 of which is already paid in. J. R. Fleming, Richard Wooley, L. S. Berg, of San Antonio; Uriah Lott, of New York; W. A. H. Miller and others are the incorporators.

Mexia—Cottonseed-oil Mill.—Scales & Culbertson, of Corsicana, will erect a 75-ton cottonseed-oil mill in Mexia.

Palestine—Sewerage System.—The city will construct a sewerage system. The mayor can give information.

San Antonio—Medicine Factory.—J. P. Greene, W. H. Weiss and E. M. Greene have incorporated the Paolo Medicine Co. with a capital stock of \$40,000.

San Antonio—Electric-power Plant, etc.—A. H. Dillard, C. E. Harris, W. J. Clark, F. A. Barnaby, F. C. Dow and others have incorporated the Citizens' Electric Power & Street Railway Co. with a capital stock of \$30,000.

San Marcos—Cotton Compress.—A \$35,000 stock company has been formed to erect a cotton compress.

San Marcos—Cottonseed-oil Mill.—A \$40,000 stock company has been organized to erect a cottonseed-oil mill.

San Saba—Ice Manufacturing.—Brownwood parties think of erecting ice factory in San Saba.

Temple—Cottonseed-oil Mill.—Scales & Culbertson, of Corsicana, will erect a 125-ton cottonseed-oil mill in Temple.

Temple—Plow Works.—The Temple-Blackland Plow Co. has been reorganized, and will increase the capacity of its works. T. L. Hollingsworth is president; H. G. Wegner, secretary and treasurer, and W. A. Barclay, manager.

Temple—Furniture Factory.—The Temple Furniture Co. has been reorganized with a capital stock of \$50,000, and will resume operations at its factory. Captain Temple, Jno. F. Manning, Jno. Parham and A. B. Patton will apply for charter.

Temple—Land Company.—B. D. Lee, W. D. Hall, J. T. Smither and H. P. Robertson have incorporated the Robertson Land Co. with a capital stock of \$25,000.

Waco—Lightning-rod Works, etc.—S. E. Mess and others have formed a company for the manufacture of lightning-rods and similar goods.

Waco—Bottling Works.—W. B. Thomson, W. B. Kepley and A. L. Lazenby have incorporated the Artesian Manufacturing & Bottling Co. with a capital of \$12,500.

Waxahachie—Broom Factory.—A. Truttel will start a broom factory.

VIRGINIA.

Alexandria—Brick and Tile Works.—The brick manufacturing company reported last week as organized by Geo. C. Videtto & Co. will be known as the Wellington Brick & Tile Co. The plant is new and provided with complete outfit of new machinery. A. M. Buckus, of Northeast, Pa., is president; Geo. C. Videtto, of Washington, D. C., secretary, and E. Frost, of New York, treasurer and manager; capital stock \$100,000.

Charlottesville—Knitting Mill.—Jno. R. Emsley will rebuild his Monticello Knitting Mill (manufacturing hosiery) reported in this issue as burned.

Chilhowie—Brick Works.—The Virginia Vitri-fied Brick & Tile Co. will increase the capacity of its plant.

Ellersson—Corn and Flour Mill.—W. C. Newman has put in a corn and flour mill.

Lynchburg—Factory.—Alexander Leftwich will erect a new factory.

Manchester—Electric-power Plant.—The Richmond Railway & Electric Co. contemplates erecting a power-house in Manchester.

Newberry Mills—Flour and Woolen Mills.—The Reed River Land Co. will rebuild its flour and woolen mills reported in this issue as burned.

Newport News—Knitting Mill.—The Freedom Manufacturing Co. has been organized to establish a knitting mill. Frederick Douglas is president; capital stock \$200,000.

Norfolk—The Building Company of Norfolk has been incorporated to deal in real estate, etc. H. L. Page is president; Geo. W. Dey, vice-president, and A. F. Penzold, secretary and treasurer; capital stock \$25,000.

Roanoke—Saw Mill.—Stover & Smith have established a saw mill near Roanoke.

Roslyn—Brick Works.—The Roslyn Brick Co. has been chartered with a capital stock of \$50,000. Its purpose is to manufacture and sell brick.

Round Hill—Flour Mill.—H. Lodge & Co. can give information of the roller flour mill reported last week as to be built.*

Staunton—Machine Works.—The Eureka Brick-Cleaning Machine Co. has been incorporated to manufacture a patent machine for cleaning mortar from brick. Jno. D. Crowle is president; W. G. Kinney, vice-president and general manager, and A. E. Harnsberger, secretary and treasurer; capital stock \$25,000.

Staunton—Iron Foundry.—Wm. McKeever will erect an iron foundry.

Suffolk—Iron Works.—R. D. Whitehorn and A. J. Murphy have purchased and will operate the Suffolk Iron Works.

Waynesboro—Iron Bridges.—Two iron bridges will be built and estimates are wanted at once. Jno. Paul, Fishersville, Va., can give information.

WEST VIRGINIA.

Bunker Hill—Flour Mill.—A. Arnold is putting in a 25-barrel roller process flour mill. Machinery has been purchased.

Creston—Oil and Gas Company.—M. Vandall and others have incorporated the Creston Oil & Gas Co.

Hazleton—Stave Mill.—Gnab & Co. have erected a stave mill.

Hazleton—Stave Mill.—William D. Arthur will erect a stave mill.

Huntington—Excelsior Works.—Chas. E. Henry has purchased the Huntington Excelsior Co.'s plant, and will double its capacity and operate it.

Moundsville—Mineral Wool Factory.—The mineral wool factory reported last week will be operated by the Globe Mineral Wool Co., organized with a capital of \$50,000.

Powellton—Towboat Line.—Evan Powell, of Powellton, and Jas. F. Brown, E. W. Knight, Malcolm Jackson and S. D. Littlepage, of Charleston, have incorporated the Powellton Towboat Co. with a capital stock of \$50,000.

BURNED.

Baltimore, Md.—Matthai, Ingram & Co.'s tin and japanned-ware factory annex; loss \$75,000.

Denison, Texas.—The Denison compress; loss \$150,000.

Charlottesville, Va.—The Monticello Knitting Mill, John R. Emsley, proprietor; loss \$14,000.

Middlesborough, Ky.—The Middlesborough Furniture Co.'s factory; loss \$40,000.

Newberry Mills, Va.—The Reed River Land Co.'s flour and woolen mills; loss \$50,000.

BUILDING NOTES.

Baltimore, Md.—Church.—A new Catholic church will be built at Wilkens avenue and Mul-likin lane by the Benedictines. Rev. Mer-nad Jeggler, Pratt and Mount streets, can give information.

Baton Rouge, La.—Church.—B. D. Price, of Philadelphia, Pa., prepared the plans for the Methodist church lately noted. John T. Smith has contract at \$7,000.

Chilhowie, Va.—J. H. Carner will erect a store building.

Columbus, Ga.—Hospital.—The building of a city hospital is contemplated.

Comer, Ga.—Church.—The Universalists will probably build a church in Comer.

Cotton Plant, Fla.—Church, etc.—A church and Masonic hall will be built at Cotton Plant. Bids will be received until March 25 by James Cribbitt, York, Fla.

Covington, Ky.—Building permits have been granted Edward Dumphy for a three-story double brick building to cost \$6000; Woods & Stephano, a three-story brick building to cost \$5800, and J. Volpersheim, a two-story brick building.

Crystal River, Fla.—Clubhouse.—J. L. Millis, of Ocala, has been awarded contract for an \$8000 clubhouse.

Elkins, W. Va.—Hall.—The erection of a city hall is contemplated. The mayor can give information.

Floresville, Texas.—O. D. Rhode will erect a large two-story brick business building. D. J. B. Treon will also erect a brick business building.

Fort Valley, Ga.—Church.—The Methodists will build a church.

Fort Worth, Texas.—The county commissioners have awarded contract for a two-story brick and stone building, 100x100 feet, to cost \$20,000. It will be used for courthouse purposes until the contemplated \$400,000 courthouse is built.

Hillsboro, Texas.—Edward Rogers will build a brick block.

Henderson, Ky.—Church.—The plans of Crap-sey & Brown, of Cincinnati, Ohio, have been adopted for the new edifice for the First Presby-terian Church. The church and parsonage will cost \$52,300.

Houston, Texas.—Adam Clay will build a three-story business house, 50x100 feet, to cost \$13,500.

Houston, Texas—Clubhouse.—J. T. Mason will erect a four-story club and theatre building.

Houston, Texas—Hotel.—The Morgan Point Land & Loan Co., J. L. Mitchell, vice-president, contemplates building a hotel at Morgan's Point.

Houston, Texas.—William M. Rice con-templates erecting a four-story business building.

Junction City, Ky.—Courthouse.—The commissioners' court of Kimble county will receive bids until April 8 for the completion of the court-house of Kimble county. W. G. Boyle, clerk, can be addressed.

Knoxville, Tenn.—Office Building.—H. Hart will erect a three-story brick office building.

Knoxville, Tenn.—Shields Bros. will erect a four-story brick building 30x150 feet; it will cost \$15,000.

Knoxville, Tenn.—Hotel.—R. Z. Gill will probably prepare plans for the hotel noted in last issue as contemplated at Whittle Springs. It will be built in sections, the first of which will not exceed in cost \$25,000. J. M. Whittle, M. F. Caldwell and C. A. Nickerson are interested.

Lakeland, Fla.—Warehouse.—Sloan, Green & Co. will build an iron warehouse 61x150 feet.

Lewisburg, W. Va.—T. U. Walter, of Hunting-ton, will prepare plans for a building for the Lewisburg Female institute.

Little Rock, Ark.—Architect Harding has pre-pared plans for a two-story brick business build-ing for Charles Schattler to cost \$5000.

Little Rock, Ark.—School Building.—Thomas Harding will furnish plans for the \$20,000 school house to be erected in the Centennial addition.

Logan, W. Va.—Jail.—Logan county will build a new jail. J. B. Wilkinson can be addressed.

Lynchburg, Va.—S. P. Halsey has awarded con-tract to Wilson & Slay for three business build-ings.

Macon, Ga.—Hall.—Work will shortly com-mence on a three-story brick and stone building for the Odd Fellows. D. B. Woodruff prepared the plans.

Macon, Ga.—Jail.—The Pauly Jail & Manu-facturing Co. has been awarded the contract at \$5600 for remodeling the Bibb county jail.

Morganton, N. C.—Hospital.—A \$12,000 addition will be built to the State Hospital. J. A. Dickson can be addressed.

Morristown, Tenn.—College.—The building for the Morristown Normal Academy, lately noted, will be a four-story brick and stone structure. It will have heating apparatus, etc., and cost be-tween \$25,000 and \$30,000. Rev. J. S. Hill, pres-ident, can be addressed.

Nashville, Tenn.—School Building.—The city council has passed an ordinance appropriating \$50,000 for a school building at East Nashville.

New Orleans, La.—Gymnasium.—The Young Men's Gymnastic Club intends erecting a three-story addition to its gymnasium.

Newport News, Va.—Depot.—The Chesapeake & Ohio Railway Co. (office Richmond) will, it is stated, soon commence work on a new freight depot at Newport News.

Norfolk, Va.—Church.—G. B. Williams is pre-paring plans for a \$20,000 edifice for the Union Christian Church. It will be of brick, 68x98 feet.

Oakland, Md.—Courthouse.—The building of a new courthouse by Garrett county is talked of.

Roanoke, Va.—The Fidelity Investment Co. is arranging for the building of a business block.

Rock Hall, Md.—Hotel.—Wyatt & Nolting, of Baltimore, are preparing plans for the hotel noted lately as contemplated by the Rock Hall Land & Improvement Co. It will be known as the Washington Inn, and will have from 80 to 100 rooms.

Rock Hill, S. C.—Church.—The A. R. P. con-gregation will build a church. John A. Black can inform.

San Antonio, Texas—College.—Alfred Giles is preparing plans for a two-story and basement building to be erected on Government Hill and to be used as a military college. It will accom-modate 150 cadets and cost about \$50,000.

Savannah, Ga.—Hall.—A company is being organized to build a music hall. C. H. Olmstead can be addressed.

Savannah, Ga.—School Building.—Charles Henry, of Akron, Ohio, will furnish plans for the school building to be erected by the Independent Presbyterian Church.

Shreveport, La.—Depot.—The Vicksburg, Shreveport & Pacific Railway Co. (office, Cincin-nati, Ohio) will, it is stated, build a new passen-ger depot in Shreveport.

Staunton, Va.—Church.—The Episcopalians may build a new church. James H. Skinner can give information.

Tampa, Fla.—A. H. Ferguson has let contract for the erection of two store buildings at West Tampa. Ernest Ellinger has awarded contract for six two-story store buildings at the same place.

Tyler, Texas—Church, etc.—The Catholics are having plans prepared for a \$15,000 edifice. They may also erect a school building.

Washington, D. C.—W. S. Plager will erect an \$8000 residence to have hot-water heating ap-paratus, etc.; C. F. E. Richardson will erect two three-story dwellings 25x70 feet to have steam heat, etc., and cost \$20,000; G. P. Newton will erect a block of houses to cost \$30,000.

Way Cross, Ga.—Hotel.—A movement has been started to build a \$50,000 hotel.

Wheeling, W. Va.—Church.—Leiner & Faris have prepared plans for remodeling the German Methodist Episcopal Church.

Wheeling, W. Va.—Frank Perkins has been awarded contract for the brick work of the

Egerton building. It will be a four-story brick business house.

Wheeling, W. Va.—Hall.—The Young Men's Christian Association will enlarge its hall build-ing at cost of about \$10,000.

Winston, N. C.—Buxton & Pepper have accepted the plans of Gustaf Bottiger for a three-story brick and granite business building. It will have steam heat, etc.

Woodlawn, Ala.—College.—The North Alabama Conference Educational Society will build a col-lege at Woodlawn. Rev. J. S. Glasgow can give particulars.

Yorkville, S. C.—Courthouse.—Niernsee & La Motte, of Columbia, will furnish plans for the new courthouse for York county.

RAILROAD CONSTRUCTION.

Railroads.

Berkeley Springs, W. Va.—The Potomac Short Line Railroad Co. has been incorporated by T. H. B. Dawson and others to build a railroad from a point on the south bank of the Potomac river, in Morgan county, to a point near Hancock, Md. The capital stock is \$20,000.

Bowie, Texas.—The Chicago, Rock Island & Pacific Railroad Co. (office, Chicago, Ill.) has awarded contract for building 100 miles of its ex-tension south from Bowie. The line is projected via Fort Worth to Dallas.

Burnet, Texas.—The required bonus of \$40,000, right of way and depot grounds for the extension of the Austin & Northwestern Railway (office, Austin) from Burnet to Lampasas have practi-cally been obtained. Surveyors will be at work locating the line at an early date.

Charleston, W. Va.—The Indian Creek Coal & Transportation Co. has been chartered to build and operate a 15-mile railroad up Indian creek, Kanawha county. This is to be a feeder to the new Charleston, Clendenin & Sutton Railroad, now being built up Elk river. The incorporators are Charles J. Hunt, Walker L. Granger, W. A. Sorin and Jas. G. Hunt, of Cincinnati, Ohio, and P. G. Zumy, of Hartwell, Ohio. The capital stock is \$10,000.

Charlotte, N. C.—The Columbia, Charlotte & Winston Railroad Co. has received its charter from the legislature.

Cheraw, S. C.—Chesterfield county has voted to subscribe \$1700 per mile to the South & North Carolina Railroad for every mile of railroad it builds within the county.

Cumberland, Md.—The Cumberland Railway Co. has been organized with Hon. C. Wood Dailey, president; T. B. Davis, J. A. Millholland, Hopewell Hebb, Asa Willson, C. W. Dailey, di-rectors, and E. W. S. Moore, secretary. It will build a railroad from Cumberland, Md., to Moorefield, W. Va., and surveys are being made.

Davis, W. Va.—The Beaver Creek Railroad Co. will shortly commence surveys for an extension from the present terminus of its road to Moore-field. The line is now built from Davis up Beaver creek to the head of Stony river, a dis-tance of about fourteen miles.

Durham, N. C.—The Durham & Charlotte Rail-road Co., which has been chartered by the legis-lature to build a railroad through the counties of Durham, Chatham, Moore, Montgomery, Stan-ly, Cabarrus and Mecklenburg, is composed chiefly of Philadelphia capitalists. The company will buy out a railroad, ten miles of which is graded in Chatham and Moore counties. The total length of the road will be about 130 miles, and the company has a capital stock of \$1,500,000. Wm. A. Guthrie, of Durham, can be addressed for further particulars.

Gauley Bridge, W. Va.—The Gauley Coal Land Association will advance funds for making a survey of the proposed Chesapeake, Shendun & Western Railroad.

Manchester, Va.—The Richmond, Manchester & Middleburg Railway Co., which was chartered by the legislature, has organized with G. E. Fisher, president; F. J. Craigie, secretary, and Charles Watkins, A. L. Adamson, W. W. Baker and John E. Taylor, directors.

Memphis, Tenn.—The Union Railway Co. ex-pects to soon complete the remaining two miles of its belt railroad, which will connect it with the Louisville & Nashville.

Ronceverte, W. Va.—The Ronceverte & Lewis-burg Railroad Co., noted in last issue as chartered to build a railroad from Ronceverte to Lewisburg, will shortly make surveys for its road. No orders have been given as yet for rails, rolling stock, etc. Hon. Charles D. Haines, Kinderhook, N. Y., is president, and can be addressed.

San Angelo, Texas.—The Gulf, Colorado & Santa Fe Railroad Co. (office, Galveston) will, it is stated, extend its road from San Angelo to Pecos City, a distance of 160 miles.

Swansboro, N. C.—The Neuse & Swansboro Railroad Co., which received its charter from the legislature, will shortly be organized in New York city. The road will be thirty miles in length. It is planned to run from Swansboro and connect at Riverdale with the Atlantic & North Carolina Railroad.

Tellico Plains, Tenn.—The Nashville, Tellico & Charleston Railroad Co., which was organized in July of last year, intends, it is stated, to build its road from Tellico Plains to Murphy, N. C., and from Athens to the Cincinnati Southern at or near Kingston as soon as possible. The road at present extends from Athens to Tellico Plains, a distance of twenty-five miles.

Texarkana, Ark.—W. L. Whitaker, president of the Texarkana & Ft. Smith Railway, has submitted a proposition to the citizens of Shreveport, La., to build that road from Texarkana south to Shreveport.

Street Railways.

Cragdale, Ala.—W. Taylor is organizing a company to build an electrical railroad from Cragdale to Talladega, a distance of four miles.

Little Rock, Ark.—G. H. Van Etten, Philip Pfeifer and F. G. Logan have applied to the city council for a franchise to build an electrical railroad.

Manchester, Va.—George E. Fisher and associates have applied to the common council for authority to build an electrical railroad. It is the purpose of the petitioners to construct a road from some point on James river opposite Rocketts, in Chesterfield county, to some point at or near the Middlethian coal mines.

Nashville, Tenn.—The Maplewood Railway Co. has been granted by the city right of way for its electrical railroad on certain streets.

Raleigh, N. C.—The extension of the Raleigh Street Railway Co.'s electrical road to Pullen Park is proposed.

San Antonio, Texas.—The Citizens' Electric Power & Street Railway Co. has been incorporated by A. H. Dillard, C. E. Harris, F. C. Dow and others. The capital stock is \$300,000.

Thomasville, Ga.—The Thomasville & Suburban Railway Co. has obtained right of way to build a street railway.

MACHINERY WANTED

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Blower.—G. W. Rutherford, Piedmont, Ala., will want a 20-inch blower.

Canning Machinery.—D. S. Rogers, Americus, Ga., will buy canning-machinery outfit.

Canning Machinery.—Jas. L. Sibley, Marietta, Ga., wants to correspond with manufacturers of canning-factory outfits.

Canning Machinery.—Price & Cox, Kennesaw, Ga., want to buy canning machinery.

Carousel.—C. H. Carter, Itasca, Texas, wants prices on steam riding gallery.

Cells.—C. M. Brown, Box 18, Wilmington, N. C., wants bids for furnishing two steel cells and four iron cells complete with locks, etc.

Corn Mill.—T. J. & C. N. Ingram, Lilesville, N. C., want to correspond regarding the Esopus millstones for corn.

Cotton Gin.—T. A. Pelham, Anniston, Ala., will want a cotton gin.

Cotton Mill.—The Camden Cotton Mills, Camden, S. C., will be in the market for cotton-mill outfit in the spring. Address H. G. Garrison, president.

Cottonseed-oil Mill.—Henry B. Bloom, Sumter, S. C., wants to correspond with builders of oil-mill machinery.

Distillery.—The Dew Drop Distillery Co., Louisville, Ky., will be in the market for entire outfit to build and equip a distillery. Address Frank P. Reed, president.

Dynamo.—D. M. Crosthwait, Kyle, Texas, wants bids on a 300 sixteen candle-power dynamo, with all necessary fixtures, insulators, etc., without poles, with or without power.

Dynamo.—C. M. Brown, Box 18, Washington, D. C., wants bids for a 50-light dynamo, with lamps, etc., complete. (See adv.)

Edger.—The James Lumber Co., Charleston, W. Va., wants to buy a 4-saw edger.

Engine.—The Dew Drop Distillery Co., Louisville, Ky., wants a good second-hand modern engine 12x24 at reasonable figures. Address Frank P. Reed, president.

Engine.—Price & Cox, Kennesaw, Ga., want to buy a small gas, gasoline or kerosene engine, one or two horse-power.

Engine.—W. D. Lee & Co., 275 South Canal street, Chicago, Ill., want to buy a second-hand Corliss engine, 75-125-15-250 horse-power.

Engraving Outfit.—J. D. Clark, Scranton, Miss., wants a small-sized outfit for photo-electric engraving.

Evaporators.—George C. Conway, San Pedro Lula, Honduras, C. A., wants to correspond with manufacturers of fruit evaporators; wants to purchase an evaporator for drying bananas.

Flour Mill.—Outfit for roller process mill is wanted. Address H. Lodge & Co., Round Hill, Va.

Flour-mill Machinery.—T. J. & C. N. Ingram, Lilesville, N. C., desire to correspond with manufacturers regarding the roller and French burr process for wheat.

Gas Machine.—Rev. J. S. Hill, Morristown, Tenn., wants estimates on a gas machine for lighting a college.

Gear-cutter.—G. W. Rutherford, Piedmont, Ala., will want a gear-cutting machine.

Grist Mill.—Lewis Harman, Clifton Forge, Va., will purchase a feed and hominy mill.

Heading Machine.—The Columbus Barrel Manufacturing Co., Columbus, Ga., wants to buy a heading circular, from smallest to largest size, for tight work.

Hub and Spoke Machinery.—Willard Woodall, Smithfield, N. C., wants to buy machinery for the manufacture of spokes, hubs and rims.

Knitting Machinery.—Price & Cox, Kennesaw, Ga., want to buy knitting machinery.

Lathe.—"C. E. E." care MANUFACTURERS' RECORD, wants a second-hand pulley-boring lathe, head to swing eighty-four inches.

Lathe.—J. M. Cummings, Winston, N. C., will buy a woodworking lathe.

Laundry Machinery.—The Electric Carpet-Cleaning Works and Laundry, New Albany, Ind., wants to correspond with manufacturers of laundry machinery.

Locomotive.—A small freight locomotive of three feet six inches gage is wanted, second-hand preferred. Address "C. E. E." care MANUFACTURERS' RECORD.

Mortiser.—J. M. Cummings, Winston, N. C., will buy mortising machine.

Piping.—J. M. Cummings, Winston, N. C., will buy piping.

Planers.—J. E. Garrison, Lake Providence, La., will need a planer.

Printing Presses.—Clough & McMullen, Box 34, Lakeland, Fla., want prices on first-class newspaper and job outfit.

Roofing.—J. M. Cummings, Winston, N. C., will buy iron roofing.

Saw.—J. M. Cummings, Winston, N. C., will buy a band saw.

Saws.—J. E. Garrison, Lake Providence, La., will need saws.

Saw Mill.—The Maulboro Lumber Co., Brigham, S. C., wants to buy a saw mill of 30,000 feet capacity, with carriage and box.

Shafting.—J. M. Cummings, Winston, N. C., will buy shafting.

Shaper.—G. W. Rutherford, Piedmont, Ala., will want a shaper.

Tanks.—The Rock Hill Buggy Co., Rock Hill, S. C., wants to correspond with manufacturers of wooden tanks.

Tobacco Machinery.—J. W. Waynick, Bristol, Tenn., wants to correspond with manufacturers of the latest improved machinery for manufacturing smoking tobacco.

Trimmer.—The James Lumber Co., Charleston, W. Va., wants to buy a 2-saw trimmer.

Water Works.—The city clerk of Greenville, Miss., will receive sealed bids until April 4 for the construction of water works. (See adv.)

Water Works.—The Mines Water Co., Shenandoah, Va., will soon contract for the construction of a system of water works.

The Rock Hill Buggy Co., of Rock Hill, S. C., wants to correspond with manufacturers of hose and other fire-extinguishing apparatus.

Bids for the construction of locks and dams Nos. 10 and 11 of the Great Kanawha improvements in West Virginia were opened lately, but the resident engineer, A. M. Scott, of Wheeling, W. Va., found them unsatisfactory, and new bids will be wanted. The lock proposed is to be 411 feet long, 342 feet between quoins and fifty-five feet wide in the chamber; dam to be movable and consist of a navigation pass 248 feet long, centre pier and a wier 300 feet long.

D. D. Apperson, Staunton, Va., wants to rent a pile-driver for two weeks.

AMONG the many buildings equipped during January and February with the swinging hose-rack manufactured by John C. N. Guibert, 115 Broadway, New York, were: Hotel Stenton, Philadelphia, Pa.; Hotel Delmonte, New York city; Hotel New Netherlands, New York city; United Charities Building, New York city; The Leader building, Chicago, Ill.; Young & Larrabee, bakery, Syracuse, N. Y.; East St. Louis Ice & Cold Storage building; Tremont and Suffolk Mills, Lowell, Mass.; Woolson Spice Co., Toledo, Ohio; the Lozier Manufacturing Co., Toledo, Ohio; Protestant Hospital, Toledo, Ohio; Grand Opera-House, Atlanta, Ga.

SOUTHERN FINANCIAL NEWS.

New Banks.

Chattanooga, Tenn.—The Chattanooga Banking & Storage Co. has been organized with W. E. Aschcraft, president; W. H. Hackney, vice-president, and John R. Wallace, cashier. The capital stock is \$500,000.

Fordsville, Ky.—John T. Smith, Jr., of Fordsville, will be president, and I. C. Adair, of Hawesville, cashier, of the bank reported in last issue as being organized. The capital stock will be \$15,000.

Hempstead, Texas.—John G. James, of Austin, and associates will, it is stated, establish a national bank in Hempstead about April 1 with a capital stock of \$50,000.

New Orleans, La.—J. C. Morris, president of the Canal Bank, is at the head of movement to organize a new savings bank with a capital stock of \$500,000.

Norfolk, Va.—The Norfolk Bank for Savings and Trusts is being organized by C. G. Ramsay, C. W. Grandy, T. R. Ballentine, A. P. Thom and others. The capital stock is to be not less than \$100,000.

Orlando, Fla.—Steps have been taken to organize a new bank with a capital stock of \$50,000.

Orlando, Fla.—The Citizens' National Bank and the First National Bank will shortly consolidate. The consolidation will be capitalized at \$150,000, and Nat Poyntz will be president; James L. Giles, cashier, and O. T. Poyntz, assistant cashier.

Smithfield, N. C.—Wm. M. Sanders and others are the incorporators of the Bank of Smithfield, lately noted.

Weatherford, Texas.—The Merchants and Farmers' National Bank has increased its capital stock from \$100,000 to \$150,000.

Annapolis, Md.—The Masonic Building Association has been incorporated by L. Dorsey Gasaway, W. L. Marcey, L. J. M. Boyd and others.

Austin, Texas.—Senator Jester's bill to provide for the issuance of 4 per cent. 40-year State bonds to cover \$486,500 worth of past due bonds has passed the senate of the State legislature. It is proposed either to sell these to the State institutions who hold the overdue paper, or else put them on the market.

Columbia, S. C.—The stockholders of the Commercial Bank have elected J. A. Willis president and Charles Ellis vice-president.

Covington, Ky.—The Guarantee Bond & Investment Co. has been incorporated by R. W. Dugan, E. L. Nash and S. D. Gibbs. The capital stock is \$100,000.

Davis, W. Va.—The Beaver Creek Railroad Co. has executed a mortgage to secure an issue of \$500,000 of bonds for construction purposes.

Gadsden, Ala.—Cherokee county will, at an early day, vote on the question of issuing \$20,000 of bridge bonds. The county clerk can be addressed.

Galveston, Texas.—The City Street Railway Co. has sold \$1,000,000 of its bonds. The proceeds will be used for retiring the present outstanding bonds of the company, paying off floating debt and making further improvements.

Harriman, Tenn.—The city has voted to issue \$110,000 of bonds to build water works, electric-light plant and sewers. The mayor can be addressed.

Louisville, Ky.—The New Galt House Co. has amended its charter, securing authority to issue bonds to the amount of \$150,000.

Nashville, Tenn.—An ordinance has passed the city council providing for the issuance of \$400,000 of 30-year 4½ per cent. sewer bonds. The mayor can be addressed.

New Orleans, La.—H. G. Seeligson has been appointed assistant cashier of the Southern National Bank.

Paris, Tenn.—The city will shortly vote on a proposition to issue \$15,000 of 20-year 5 per cent. electric-light and water-works bonds. Y. Q. Caldwell, mayor, can be addressed.

Radford, Va.—George E. Cassel, president of the Exchange Bank of Radford, the affairs of which were complicated by the disappearance of the cashier, writes that the bank is solvent and depositors have already been paid.

Waco, Texas.—The city has sold \$55,000 of bonds to Farson, Leach & Co., of New York city. These bonds are for the redemption of Waco & Northwestern subsidy bonds, which recently became due.

Wilmington, N. C.—At the annual meeting of the Wilmington Savings & Trust Co. officers were elected as follows: President, John W. Atkinson; vice-president, H. Walters; cashier, W. P. Toomer.

Yorkville, S. C.—An election may be held to vote on the issuance of \$10,000 of bonds for water purposes.

CONTRACTS for canning machinery for the Blackshear Canning Factory at Blackshear, Ga., and for the Carrollton Canning Factory at Carrollton, Md., have been secured by A. K. Robins & Co., of Baltimore, Md.

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